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Direct and Lead Units in Execution of Battle (Battlefield Function 20) as Accomplished by a Direct Support Field Artillery Battalion Volume 1: Function Analysis

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Armored Forces Research Unit

U.S. Army Research Institute for the Behavioral and Social Sciences

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14. ABSTRACT *(Maximum 200 words)*:

The purpose of the overall research program was to document the synchronization required by command and control tasks performed within the armored brigade, to include combat support and combat service support units. The immediate application of the documentation was to support developers of staff training in two related projects: Battle Staff Training System and Staff Group Trainer. The documentation was also intended to assist with the planning and execution of collective training.

The documentation approach was to apply function analysis (FA) techniques for battlefield functions (BFs) in the Command and Control battlefield operating system. Thirteen FAs were developed for the brigade headquarters and four supporting units: direct support field artillery battalion, engineer battalion, forward support battalion, and air defense artillery battery. The FAs were revised through a formative evaluation process that included internal review and successive external reviews by combat training centers, proponent agencies, and a review council representing potential users of the FAs. The final products include the FAs, a user's guide, and assessment packages for the BFs. This report provides the FA and user's guide for BF 20 as performed by the direct support field artillery battalion.

15. SUBJECT TERMS

Structured Training; Staff Training; Multiechelon Training; Training Strategy; Functions; Analysis of Functions; Command and Control

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FOREWORD

One of the goals for the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is to facilitate the development of training strategies that will serve the needs of the combined arms team today and into the 21st century. The indispensable foundations, the cornerstones, for meeting this goal are solid information and data bases. One such base is a set of comprehensive descriptions of how soldiers accomplish their missions. Many task descriptions have been developed where the focus is on activities within a particular Battlefield Operating System (BOS); these are often further narrowed to one BOS element within one echelon. What have been lacking are function analyses along with task descriptions that have a broader BOS perspective; one which focuses not only on intra-BOS relationships, but also the relationships of that BOS with other BOSs in accomplishing the overall mission. It is this latter perspective which is needed, for example, to define training requirements and strategies for combined arms operations.

The function analysis described in this report is a product of one of three efforts conducted under the ARI project, "Innovative Tools and Techniques for Brigade and Below Staff Training (ITTBBST)." The work in this part of ITTBBST is the fifth in a series of ARI projects directed at analyzing the vertical and horizontal synchronization required by combined arms operations. All of the projects have analyzed functions, previously labeled "critical combat functions (CCFs)" and now labeled "battlefield functions (BFs)." The previous projects analyzed: all BFs performed by a heavy battalion task force; a sample of seven BFs performed by an armored brigade; and the integration of fire support BFs as performed by an armored brigade and at echelons higher than brigade. The research in this project analyzed BFs in the Command and Control BOS. Separate coordinated analyses of these BFs were performed for the armored brigade headquarters and four types of supporting units, one of which is the Direct Support Field Artillery Battalion.

The analyses developed in the project have been used in the development of staff training in related projects within the ITTBBST program. In addition, U.S. Army Training and Doctrine Command (TRADOC) representatives have identified a variety of applications by TRADOC training and other developers as well as potentials for collective training management.

ZITA M. SIMUTIS
Technical Director

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This analysis has benefited from considerable dedicated effort on the part of many persons. The efforts of a few of these many persons are specifically and gratefully acknowledged here. An especially key person was MG (Ret) Lon E. Maggart, Commanding General of the U.S. Army Armor Center (USAARMC). Prior to and during the conduct of this effort, he contributed greatly to definition of training needs and concepts in support of Force XXI. He saw that battlefield functional analyses could provide a valuable foundation for Force XXI training development efforts; hence, MG (Ret) Maggart strongly backed these efforts.

COL G. Patrick Ritter and LTC Marvin K. Decker, acting in accordance and agreement with MG (Ret) Maggart's vision, vigorously pursued battlefield function analysis efforts and persevered in ensuring their application to Force XXI training developments. COL Ritter, Director of Directorate of Training Development and Doctrine (DTDD) at USAARMC, and LTC Decker, Chief of DTDD's Force XXI Training Program office, ensured implementation of necessary actions, and the participation of military subject matter experts and potential users of function analysis products as needed to assure quality outcomes.

Among many participants in performing the analyses themselves, and validating their integrity and validity, were members of the U.S. Army Field Artillery School (USAFAS), DTDD at USAARMC, and Operations Group at the National Training Center (NTC). Final recommendations and approval of these analyses were provided by proponents and users constituting the Force XXI Review Council. Members of the Review Council included: COL G. Patrick Ritter and LTC Marvin K. Decker, USAARMC; LTC James R. Harrison, USAARMS; LTC David M. Annen, USAFAS; LTC Larry Newman, U.S. Army Air Defense Artillery School; COL Philip Federle, U.S. Army Engineer School; LTC Roger F. Murtie, National Training Center; LTC Gilbert Pearsall, Joint Readiness Training Center; COL Roger W. Jones, TRADOC Program Integration Office-Army Battle Command System; and COL Robert J. Fulcher, 29th Infantry Regiment.

The research for and preparation of this report benefited immeasurably from the assistance provided by members of the U.S. Army Research Institute. Specifically, the authors would like to acknowledge Ms. Dorothy Finley for serving as a peer reviewer for the product. She offered constructive comments that have improved both the content and style of the report. Also, special recognition is given to Ms. May Throne, a Consortium Research Fellow from the University of Louisville assigned to Fort Knox, and Ms. Lori Cracknell. Their never ending efforts to assist in the formal production of this report will not soon be forgotten.

Finally, a large debt of gratitude is owned to BG (Ret) Bill Mullen for guidance and support on this product. He provided the program management that ensured this product is well "synched" with past products as well as the Army of the future. His continual attention to details have provided the Army with a truly unique document.

DIRECT AND LEAD UNITS IN EXECUTION OF BATTLE (BATTLEFIELD FUNCTION 20) AS ACCOMPLISHED BY A DIRECT SUPPORT FIELD ARTILLERY BATTALION

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OVERVIEW

The results of the Army Research Institute's (ARI) examination of battlefield functions (BFs) relevant to a heavy (armored or mechanized infantry) brigade combat team's combined arms operations are in two volumes. Volume 1, Function Analysis, identifies and describes various components necessary to accomplish the function. The components were selected based on their relevance to a unit trainer's interests. Volume 2, Assessment Package, is an assessment aid. It describes performance measures based on the purpose, outcomes, and tasks supporting the outcomes identified in the Function Analysis (Volume 1).

This overview provides the user with necessary and relevant information concerning the analysis of BF 20, Direct and Lead Units in the Execution of Battle, as performed by a field artillery battalion in direct support of a heavy brigade.

Tables of Organization and Equipment. This BF is designed for the cannon battalion organized under the following tables of organization and equipment (TOE):

a. 06365H000 Field Artillery Battalion, 155mm Self-Propelled, Armored/Mechanized
b. 0365L100 Field Artillery Battalion, 155mm Self-Propelled, Heavy Division
c. 0365L200 Field Artillery Battalion, 155mm Self-Propelled, Heavy Division
d. 0365L300 Field Artillery Battalion, 155mm Self-Propelled, Heavy Division

This function analysis (FA), Direct and Lead Units in the Execution of Battle (BF 20), is a product of the process of developing a training strategy for the direct support field artillery battalion. It is the third of three BFs which compose the command and control (C2) battlefield operating system (BOS). The analysis reflects all the tasks, participants, products, and processes required by the direct support (DS) field artillery (FA) battalion to achieve the outcomes necessary for the commander to direct and lead his battalion during the execution phase of a battle.

A battlefield function is defined as processes or activities occurring over time that must be performed to accomplish a mission(s) or supporting critical tasks. It provides task integration, combined arms interaction, and inter-Battlefield Operating Systems (BOSs) linkages.[1]

Synchronization of BFs provides commanders at tactical echelons with a definable outcome that materially affects the battle. Without this synchronization it is doubtful that a commander's concept and intent will be achieved.

The analysis identifies the critical tasks and subtasks undertaken by the battalion commander, his staff, and the battalion subordinate/supporting commanders. It reflects the

[1] The term "Battlefield Function (BF)" was designated by the U.S. Army Training and Doctrine Command (TRADOC) in September 1996 to replace "Critical Combat Function (CCF)". At the same time, the term was redefined. TRADOC also renamed "task analysis" (TA) to "function analysis" (FA).

continuation of the activities undertaken in performing BFs 18 and 19, as well as those tasks unique to providing fire support for the brigade deep, close, and rear battles. For the purpose of the analysis, the function is depicted as beginning when the enemy enters the brigade area of operation and ending after the battle as the brigade consolidates, reorganizes, and begins to transition into the next mission.

Synchronization, the process of massing the effects of combat power at the specific place and time chosen by the commander, starts in the planning phase (BF 18) when the brigade commander first visualizes and then articulates his intent and concept of the operation to his staff and subordinate/supporting commanders. Synchronization of fire support begins with the integration of the decide, detect, deliver, assess (D3A) methodology into the brigade commander's tactical decision-making process. Synchronization continues into the preparation phase (BF 19) with the rehearsals, other preparations for battle, and refinements of the original operations plan. In the execution phase of the battle, the DS FA battalion commander must make timely decisions based upon the rapidly changing situation. He will be the center of multiple cycles of monitoring, planning, and directing as he and his battalion react to change in mission, enemy, terrain, troops, and time available (METT-T). Fire support coordination is the primary means of synchronizing fire support. Targeting and fire planning through effective war-gaming and situationally alert fire support coordination during the engagement are the primary means of synchronizing fire support.

The military decision-making process (MDMP) outlined in the 1993 publication of field manual (FM) 101-5, Command and Control for Commanders and Staff "Draft" is the basis of the processes described in this task analysis. At the time of writing this analysis (August - December 1996), the Command and General Staff College, proponent for FM 101-5, Command and Control for Commanders and Staff, was in the process of rewriting the draft manual. This function analysis recognizes the decision by the Commanding General, Combined Arms Center, that there is only one MDMP and that commanders in the field will have to modify the single process based on situation constraints. The authors coordinated continuously with the Command and General Staff College to ensure that the doctrine reflected in this analysis is accurate and current. However, information reflected in the recently published FM 101-5 (31 May 1997) will most likely require minor modification of this analysis. The currency of this analysis will also be affected by changes to unit capabilities such as the additional technology (e.g., information systems), now in different stages of fielding. The MDMP performed under time constraints has been addressed for each task. Although these procedures can be used under any planning circumstances, they most commonly would be used by the battalion commander and staff when time for planning is short (such as when faced with the need to issue a fragmentary order (FRAGO) during the battle). As will be seen, the portrayal of the performance of the MDMP under time constraints does not omit steps, but instead recommends procedures to reduce the time required to conduct planning.

This analysis also reflects current and emerging Army doctrine based on FM 71-3, The Armored and Mechanized Infantry Brigade, January 1996, and its portrayal of the decision-making process. The MDMP outlined in the 1993 publication of FM 101-5 "Draft" is the basis of the processes described in this task analysis. Planning associated with the development of a FRAGO

is discussed in both BF 19, Direct and Lead the Battalion During Preparation for the Battle, and BF 20, Direct and Lead the Battalion During Execution of the Battle.

The battalion commander must ensure that his staff and subordinate/supporting commanders provide him with information that allows him to update his "running" estimate of the situation in the context of time-distance relationships and the capability to achieve the end states envisioned as necessary to support the brigade mission. He must focus on this desired end state in spite of the intense tempo of the battle. He must winnow out information that may clutter his thought processes; the staff must help him.

Based on experience and intuition, the battalion commander assigns missions, prioritizes and allocates resources, selects the critical times and places to act, and decides when and how to make adjustments during the battle. Normally, during the battle he will use the MDMP in a time-constrained environment.

He plans for and rehearses actions for the eventuality that his battalion tactical operations center (TOC) or he become casualties or are out of contact; he does this so that the battalion will continue the fight without interruption or loss of momentum. Continuity of operations (CONOPS) is a battle drill necessary for any operation. The planned and trained tasks that support CONOPS during a planned move are identical to those tasks necessary to achieve restoration of the fire support system due to catastrophic loss. The DS FA battalion must continue to provide fire support to protect the force during consolidation and reorganization. The battalion must conduct a hasty reorganization and consolidation as it continues fires to break up counter-attacks, prevent enemy reinforcement, disengagement, or resupply, and prepares to transition to a new mission.

This analysis includes the leading and motivation of soldiers and units, both vital components of battle command. The difference between BF 20 and BFs 18 and 19 is the importance of time, or more accurately the lack of it, because of the rapidly changing situation coupled with the need to act faster than the enemy. The brigade commander must be able to swiftly assess the situation; make quick, sound decisions; and rapidly disseminate those decisions to generate speed and efficiency relative to the tempo of the combat. He must be able to receive, evaluate, and learn from information received. The DS FA battalion commander must act in concert with his brigade commander. He must communicate to those who assist him the information to be used in the planning process that modifies or changes his previous orders for the tasking of subordinate/supporting commanders. Once deciding on a course of action, he must direct and lead the battalion in the accomplishment of the mission. There is no universally appropriate single sequence of steps that leads to success. Battle command is tactical judgment and effective decision-making combined with leadership. The commander's ability to command and control is extended by the battalion staff using the battalion command posts.

An effort was made to identify specific task titles taken directly from the appropriate Army Training and Evaluation Program - Mission Training Plans (ARTEP-MTP). The wording of each task in this analysis is sometimes a direct quote from the MTP. Generally, however, the wording of

the tasks is an integration of tasks and requirements derived from ARTEP-MTPs, applicable Field Manuals (FMs), and other related documents. Those tasks not taken from the ARTEP-MTPs are: a) derived titles that may apply only to a part of an ARTEP-MTP subtask or some other element of the ARTEP-MTP; b) multiple subtasks from several different, but related, tasks; c) tasks that are not directly stated in the ARTEP-MTP, but are implied by other tasks or requirements in an applicable FM or other related document; d) tasks derived from Center for Army Lessons Learned (CALL) publications; e) tasks developed during coordination visits with TRADOC proponent schools, U.S. Army Forces Command (FORSCOM) units, and the Combat Training Centers; or, f) performance requirements considered necessary based on experience of the analyst.

The analysis includes digital tasks extracted from the appropriate Army Training and Evaluation Program-Mission Training Plan. These tasks are, in some cases, superseded by introduction of new versions of automated systems (e.g., improved fire support automation system (IFSAS)/advanced field artillery tactical data system (AFATDS)). The documentation of procedures related to new systems has not been approved or included in the training development database. Tasks related to superseded systems have been included to facilitate revisions as further documentation becomes available. A requirement for minor modifications of this analysis is anticipated when the new ARTEP 6-115-MTP is published.

PURPOSE AND OUTCOMES

This component identifies what the battlefield function (BF) is supposed to accomplish overall, which we term as the purpose. This component also identifies the endstates or bottom line results necessary to achieve the purpose, which we term outcomes. As a consequence, this component of the analysis defines the endstates that performance of the tasks will accomplish.

PURPOSE

The artillery battalion (Bn) provides indirect fires and fire support coordination to accomplish the mission within the supported commander's intent.

OUTCOMES

1. Direct support (DS) field artillery (FA) Bn command posts (CPs) maintain continuous communications with higher, adjacent, and subordinate headquarters.

2. The DS FA Bn commander (Cdr), other decision-makers, and the DS FA Bn staff receive, evaluate, and process timely and accurate battlefield information during mission execution.

3. Tactically sound recommendations are developed and critical information is communicated by the DS FA Bn staff and subordinate leaders.

4. Sound (feasible, suitable, acceptable) decisions are made by the DS FA Bn Cdr and others within the Bn.

5. Affected units and personnel receive relevant direction, changes, and refinements to the plan in time to perform troop leading procedures and execute coordinated and synchronized actions.

6. Subordinate leaders demonstrate understanding of the critical elements of their own mission, and mission essential tasks, the DS FA Bn mission, and the Bn Cdr's intent.

7. Soldiers are motivated, disciplined, and maintain unit cohesion during the battle.

8. The DS FA Bn command, control, communications, and intelligence (C3I) capability survives and is prepared for the next mission.

FLOW CHARTS

This component provides a graphical/pictorial description of BF tasks as they are sequenced within the framework of tactical battle phases (e.g., planning, preparation, execution). The purposes of this component are: to describe the flow of tasks during each battle phase; to describe vertical task linkages (to higher and lower echelon units) and horizontal task linkages (to other BF tasks for the echelon being analyzed); and to depict information input and output which affect each task. Although the sequencing of tasks throughout each battle phase is intended to reflect the flow of tasks, tasks may be performed concurrently or may overlap with preceding or subsequent tasks.

Each echelon is described by the echelon on the left of the flow chart; a horizontal line depicts the flow of tasks by sequence, reading left to right. The horizontal line for the echelon being analyzed is thicker than all other echelon horizontal lines.

Tasks from the BF task list are applied to the echelon line in the sequence in which they occur. The tasks are depicted in a task box. Inside and to the upper left of each task box is placed the task number of the appropriate task as listed in the task list.

The linkages of tasks, both vertically and horizontally, are depicted with lines. Arrowheads are placed on lines to depict linkages or interaction with other tasks. The linkage or interaction between these tasks is detailed in the task list.

Figure 1 illustrates the battalion (Bn) or battalion task force (Bn TF) task contributing to or otherwise supporting the brigade (Bde) task.

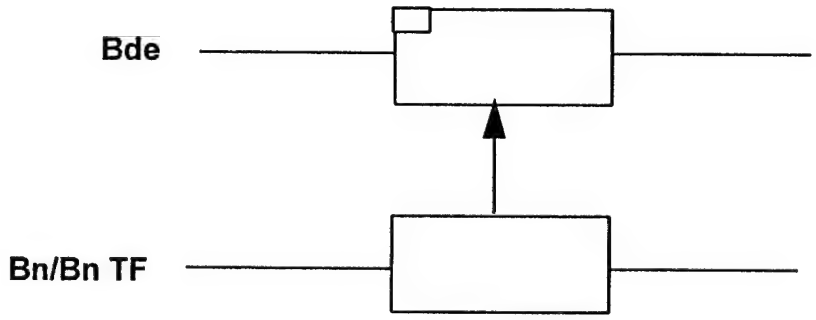


Figure 1. Depiction of a task contributing to the accomplishment of another task.

Lines with no arrowheads reflect a task and its subordinate (sub)tasks. Figure 2 illustrates this association.

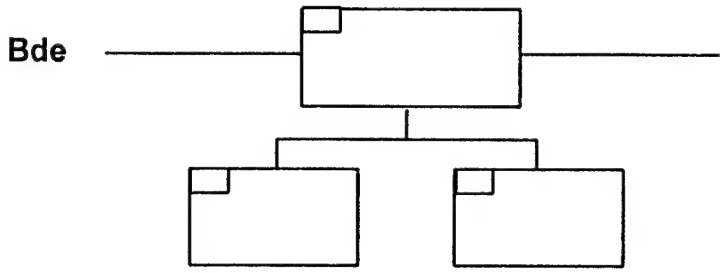


Figure 2. Depiction of the relationship between tasks and subtasks.

Inputs and/or outputs, as contained in the "Key Inputs and Outputs" component (section 5) of this BF function analysis (FA), are also reflected on the flow charts. The relevant input and/or output letter listed in the "Key Inputs and Outputs" component is listed in a box on the outside upper right of the task. Relevant information input for each task is depicted to demonstrate information which is required to perform the task; output information is that which is produced as a result of performing the task. Figure 3 illustrates how information input and output are depicted.

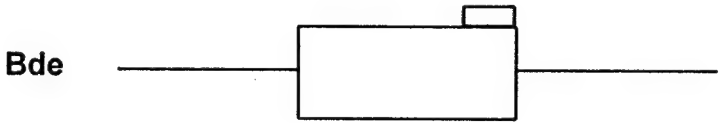
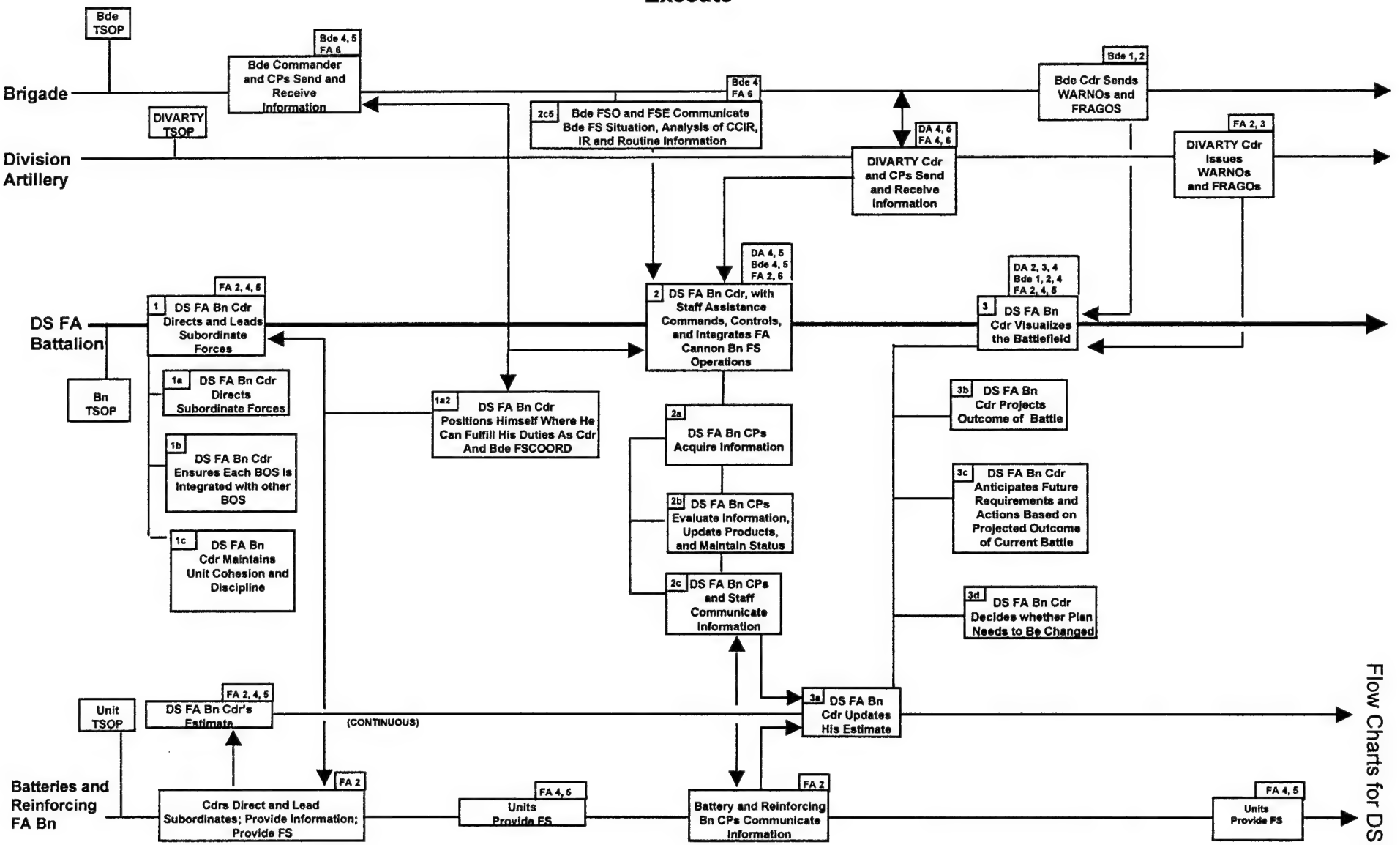


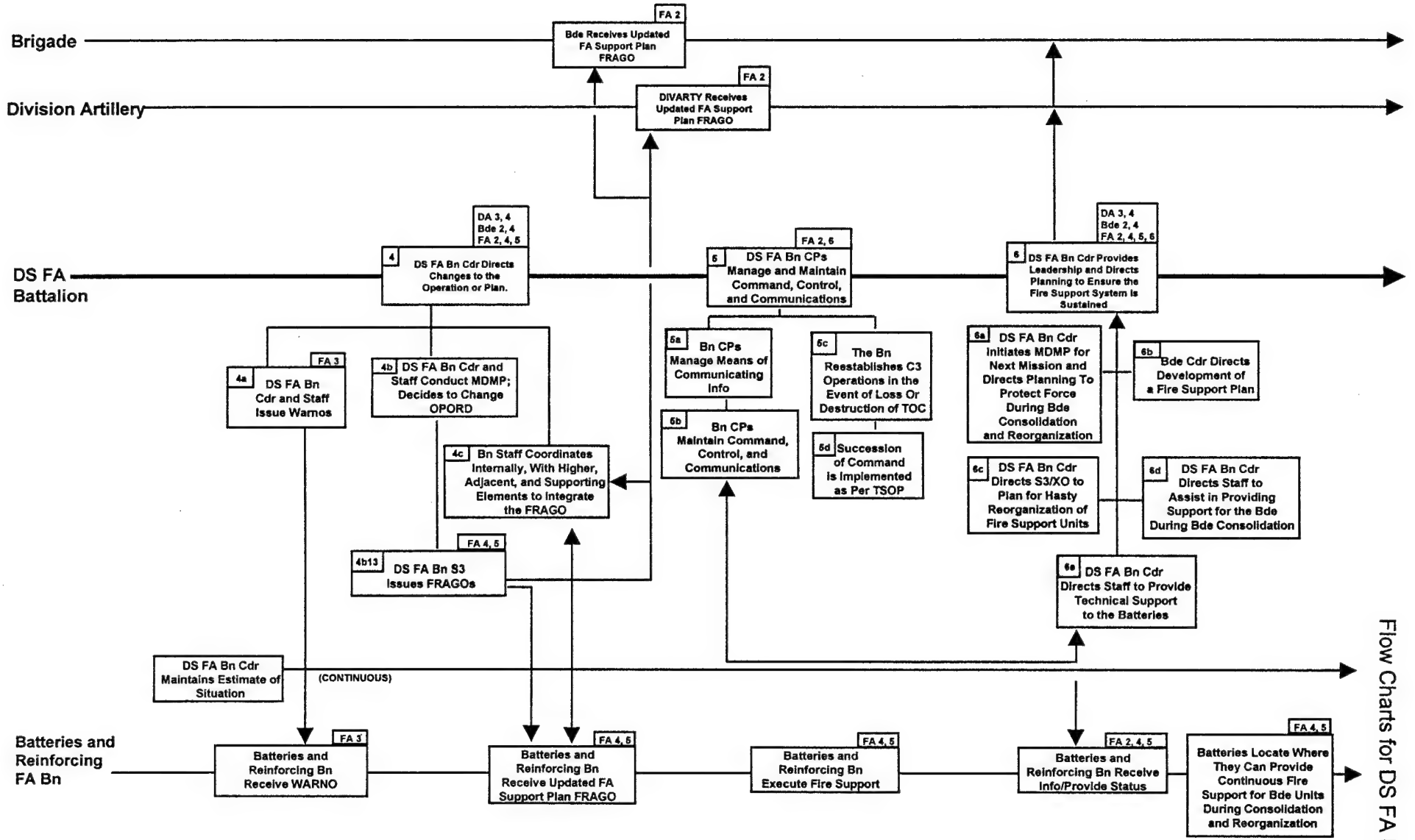
Figure 3. Depiction of placement of the box reflecting information input and output.

Task Flow
Execute



Flow Charts for DS FA Bn BF 20

Task Flow
Execute (Continued)



Flow Charts for DS FA Bn BF 20

TASK LINKAGES TO OTHER BFs/UNITS

This component links the tasks performed as a part of this function with the tasks performed in other BF or by other units. The purpose of this component is to allow the trainer or training developer to incorporate related tasks and participants into a training exercise for this BF. Tasks which link to this analysis have been extrapolated for BFs/type units for which function analyses (FAs) have not been accomplished. For tasks extracted from published BF FAs, the task number is provided.

TASKS	LINK TO OTHER BFs/UNITS
1. **The direct support field artillery battalion commander directs and leads subordinate forces.**	Reinforcing FA Bn 20, Task. - Reinforcing Bn dispatches liaison officers (LNO) to the DS FA Bn. Bde BF 15, Task. - The Bde fire support element (FSE) coordinates, synchronizes, and integrates fire support. - The targeting team updates target attack criteria. Division BF 20, Task. - The division artillery (DIVARTY) establishes improved fire support automation system (IFSAS)/advanced field artillery tactical data system (AFATDS) network. Bde BF 20, Task. - The Bde Cdr conducts briefbacks with Bn TF and slice Cdrs. Division BF 8, Task. - The DIVARTY conducts counterfire operations.
2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.**	

3.	**The direct support field artillery battalion commander visualizes the battlefield.**	
4.	**The direct support field artillery battalion commander directs changes to the operation or plan.**	Bde BF 20, Task. - The Bde conducts a fragmentary order (FRAGO)briefing. - The Bde publishes FRAGOs and warning orders (WARNO). - The Bde Cdr conducts briefbacks with subordinate and slice Cdrs. - The Bde Cdr provides guidance on follow on missions and future operations to the DS FA Bn Cdr.
5.	**The direct support field artillery battalion command posts manage and maintain command, control, and communications.**	Division BF 20, Task. - The DIVARTY establishes IFSAS/AFATDS network.
6.	**The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.**	Bde BF 20, Task. - The Bde TFs consolidate and reorganize.

KEY PARTICIPANTS BY TASK

This component identifies the training audience for training events for the related tasks. It is based on the appropriate echelon/type unit table of organization and equipment (TOE) and includes special staff (as per appropriate doctrinal reference) critical for the task accomplishment. The purpose of this component is to help commanders and trainers to identify the training audience required for a training event.

TASKS		PARTICIPANTS
1.	**The direct support field artillery battalion commander directs and leads subordinate forces.**	DS FA Bn Cdr, DS FA Bn executive officer (XO), DS FA Bn command sergeant major (CSM), DS FA Bn S2, DS FA Bn S3, DS FA Bn S3 section, DS FA Bn operations (opns) sergeant (sgt), Bde/Bn TF fire support officer (FSO), DS FA Bn fire direction officer (FDO), DS FA Bn, battery (Btry) and platoon fire direction centers (FDCs), fire support teams (FISTs), combat observation lasing teams (COLTs), DS FA Bn S1, DS FA Bn S4, DS FA Bn signal officer (SO), DS FA Bn chemical officer (CMLO), DS FA Bn Btry Cdrs.
2.	**The DS FA Bn Cdr, with staff assistance, commands, controls, and synchronizes the FA cannon battalion fire support operations.**	DS FA Bn Cdr, DS FA Bn XO, DS FA Bn CSM, DS FA Bn S2, DS FA Bn intelligence section, DS FA Bn FDC section, DS FA Bn FDO, DS FA Bn S3, DS FA Bn S3 section, DS FA Bn CMLO, Bde FSO, Bde FSE, DIVARTY S3, division FSE, DS FA Bn S1, DS FA Bn S1 section, DS FA Bn chaplain, DS FA Bn surgeon, DS FA Bn S4, DS FA Bn S4 section, DS FA Bn headquarters and headquarters battery (HHB) Cdr, DS FA Bn SO, DS FA Bn reconnaissance and survey officer (RSO), DS FA Bn communications section.
3.	**The DS FA Bn Cdr visualizes the battlefield.**	DS FA Bn Cdr, DS FA Bn XO, DS FA Bn CSM, DS FA Bn S2, DS FA Bn S2 section, DS FA Bn senior intelligence (intel) noncommissioned officer (NCO), DS FA Bn S3, DS FA Bn S3 section, DS FA Bn opns sgt, DS FA Bn CMLO, Bde FSO, Bde target officer, Bde FSE, DS FA Bn S1, DS FA Bn S1

		section, DS FA Bn personnel services non-commissioned officer (PSNCO), DS FA Bn chaplain, DS FA Bn surgeon, DS FA Bn S4, DS FA Bn S4 section, DS FA Bn senior support sgt, DS FA Bn SO, DS FA Bn RSO, DS FA Bn Btry Cdrs.
4.	**The DS FA Bn Cdr directs changes to the operation or plan.**	DS FA Bn Cdr, DS FA Bn XO, DS FA Bn CSM, DS FA Bn S3, DS FA Bn S3 section, DS FA Bn S2, DS FA Bn intel section, DS FA Bn senior (SR) intel NCO, DS FA Bn CMLO, reinforcing. Bn LNOs, Bde/Bn TF FSO, FISTs, COLTs, Bde FSE, DS FA Bn S1, DS FA Bn S1 section, DS FA Bn PSNCO, DS FA Bn chaplain, DS FA Bn surgeon, DS FA Bn S4, DS FA Bn S4 section, DS FA Bn senior support sgt, DS FA Bn SO, DS FA Bn Btry Cdrs.
5.	**The DS FA Bn command posts manage and maintain command, control, and communications.**	DS FA Bn Cdr, DS FA Bn S3, DS FA Bn assistant S3, DS FA Bn XO, DS FA Bn HHB Cdr, DS FA Bn S4, DS FA Bn PSNCO, DS FA Bn S1, DS FA Bn S4 non commissioned officer in charge (NCOIC), DS FA Bn FDO.
6.	**The DS FA Bn Cdr provides leadership and directs planning to ensure that the fire support system is sustained.**	DS FA Bn CDR, DS FA Bn XO, DS FA Bn S2, DS FA Bn S3, DS FA Bn CMLO, Bde/Bn TF FSO, DS FA Bn S1, DS FA Bn S4, DS FA Bn SO, DS FA Bn Btry Cdrs.

KEY INPUTS AND OUTPUTS

This component identifies critical input information required by participants to successfully accomplish the BF. Where information results from the performance of the BF tasks, BF information output will be identified. One BF's information output normally is provided as another BF's input. Critical input and output information is organized by the specific part of the doctrinal product or the means used to communicate the information. The orders' content reflected below is based on information obtained during the revision of the 1993 draft of FM 101-5. The orders outlines have been expanded to facilitate development of material to support unit training. The source of critical information identified is specific only to the BF echelon and function being analyzed, and is not intended to reflect all the information the product may contain. The purpose of this component is to identify information required to drive a training exercise for this BF as performed by this echelon.

The DS FA Bn Cdr performs two roles. The first is as the commander of the DS FA Bn. The second is as the Bde fire support coordinator (FSCOORD). The DS FA Bn Cdr performs tasks for both roles. The tasks performed in support of his role as the Bde FSCOORD are contained in the task analysis of Bde BF 15, Coordinate, Synchronize, and Integrate Fire Support. The tasks contained in Bde BF 15 relative to the Bde FSCOORD role are therefore inherently linked to this BF. Although Bde BF 15 tasks are not contained here, they are fully applicable and necessary to define all tasks the DS FA Bn Cdr is responsible for performing. The DS FA Bn Cdr must position himself where he can best perform tasks in both roles.

KEY INPUTS

D - 1 DIVISION TACTICAL STANDING OPERATING PROCEDURES (TSOP)

a. Division targeting process.

b. Time requirements for submission of reports and requests.

c. Liaison officer (LNO) procedures and responsibilities.

d. Target numbering system.

e. Orders process (including products developed).

f. Laser pulse repetition frequency code distribution.

g. Command post (CP) organization and operation.

h. Army airspace command and control (A2C2) operations.

i. Communication system distribution and operation (local area network [LAN], wide area network [WAN]).

j. Attachment and detachment procedures.

k. Division deep battle operations.

l. Division intelligence and information dissemination procedures and systems.

m. Division rehearsal procedures.

n. Fratricide countermeasures and clearance of fires procedures.

DA - 1 DIVISION ARTILLERY (DIVARTY) TACTICAL STANDING OPERATING PROCEDURE (TSOP)

a. Succession of command.

b. CP organization and operation.

c. Orders process (including products developed).

d. Automated fire control procedures.

e. LNO procedures and responsibilities.

f. Alarms and warning procedures.

g. Fixed call signs and code words.

h. Road march procedures.

i. Assembly area operations.

j. Operations security (OPSEC) and security measures.

k. A2C2 operations.

l. Communication system distribution and operations (LAN, WAN).

m. Time requirements for submission of reports and requests.

n. Target numbering system.

o. Laser pulse repetition frequency code distribution.

p. Attachment and detachment procedures.

q. Logistics operations.

r. Division targeting team activities and targeting process.

s. Information management procedures (e.g., dissemination, logs, and journals).

t. DIVARTY rehearsal procedures.

u. Fratricide countermeasures and clearance of fires procedures.

v. CP standing operating procedures (SOPs).

DA - 2 DIVARTY WARNO

a. Mission, intent, and commander's critical information requirements (CCIR) of DIVARTY commander.

b. Area of operations (AO).

c. Enemy situation.

d. Earliest time of movement.

e. Division deep operations.

f. Graphics (e.g., fire support, maneuver, obstacles, airspace coordination areas [ACAs]).

g. Assets available for collection of information and intelligence.

h. Projected task organization and support relationship for fire support units and target acquisition assets.

i. Type of fire support munitions available, including controlled supply rate (CSR) and required supply rate (RSR).

DA - 3 DIVARTY FRAGMENTARY ORDER (FRAGO)

a. Task organization.

1) FA battalions, batteries, target acquisition assets.

2) Collection assets.

b. Situation paragraph.

c. Mission paragraph.

d. Execution paragraph - DIVARTY commander's intent.

1) Concept of the operation.

2) Organization for combat.

3) Coordinating instructions.

a) Target acquisition.

b) Survey.

c) Automated fire control.

d) High-payoff target list (HPTL).

e) Attack guidance.

f) Nuclear, biological and chemical (NBC) defense.

g) Meteorology (met) support.

h) LNO requirements.

i) Fire plan.

j) Fire support coordination measures (FSCMs).

k) Priority intelligence requirements (PIR) and information requirements (IR).

l) Intelligence acquisition tasks.

m) Ammunition restrictions.

n) Antifratricide measures that are not reflected in TSOP.

e. Service support.

1) CSR/RSR.

2) Priorities (by all classes).

3) Supply distribution.

f. Command and signal.

DA - 4 GUIDANCE AND INFORMATION FROM THE DIVARTY COMMANDER AND STAFF

a. Situation reports (SITREPs) from DIVARTY S3.

b. Requests for deconfliction of terrain requirements from DIVARTY S3.

c. Division and corps designated high-payoff targets (HPTs) and FSCMs.

d. Maintenance, transportation, and supply updates from DIVARTY S4.

DA - 5 INTELLIGENCE SUMMARIES, SPOT REPORTS

a. Enemy artillery capabilities (e.g., ranges, system types, systems capabilities).

b. Enemy NBC capabilities.

c. Enemy air defense capabilities.

d. Location and composition of enemy obstacles.

e. Enemy air routes.

f. Enemy air assets availability.

g. Known and suspected enemy locations.

h. Enemy order of battle (OB) (e.g., size, type, strength) for enemy units the brigade is expected to encounter.

i. Terrain analysis of battle space (mobility corridors, avenues of approach).

j. Templates (situation, event).

k. Weather.

l. DIVARTY information collection systems and sensors availability.

Bde - 1 BRIGADE (BDE) WARNO

a. Mission, intent, and CCIR of Bde commander.

b. Graphics.

c. Fire support munitions available; CSR and RSR.

d. Enemy situation.

e. Assets available for collection of information and intelligence.

f. Task organization.

Bde - 2 BDE FRAGO

a. Body of the order (core order).

1) Division commander's intent and CCIR.

2) Bde commander's intent and CCIR.

3) Written concept of the operation.

a) Maneuver.

b) Fires.

c) Intelligence.

4) Designation of routes, axes, areas, sectors, or battle positions.

5) Designation of main and supporting efforts.

6) Coordinating instructions.

7) PIR, IR.

8) Task organization and effective times.

9) Security force operations and battle handoff.

10) Communications and frequency hopping.

11) Rehearsal schedule (if appropriate).

12) OPSEC requirements.

13) Mission timelines.

b. Intelligence annex and overlays.

1) Situation template (SIT TEMP).

2) Terrain analysis.

3) Weather analysis.

4) PIR.

5) Reconnaissance and surveillance (R&S) plan.

6) Event template.

7) Modified combined obstacle overlay (MCOO).

8) Named areas of interest (NAIs) and target areas of interest (TAIs).

9) Intelligence acquisition tasks.

c. Fire support annex, five paragraphs of the OPORD (base order), or both.

1) Commander's guidance for fire support.

2) Target list. (Appendix [App.])

3) Fire support execution matrix (FSEM). (App.)

4) Schedule of fires. (App.)

5) HPTs.

6) Priority of fires, by unit and target (FSEM).

7) FSCMs (para. 4, base order).

8) Concept of fires.

9) Close air support (CAS) (air tasking order [ATO]).

10) FA support.

11) Naval surface fires (NSF) support.

12) Target acquisition plan (tab to field artillery support plan [FASP]).

13) Observer plan (non-doctrinal tool).

14) Target refinement cutoff time.

15) Survey plan (tab to FASP).

16) FASP (App).

d. Engineer annex/overlays.

1) Time schedule for use of engineer assets.

2) Bde commander's priority for engineer support (obstacles, survivability positions, use of engineer assets).

3) Family of scatterable mines (FASCAM) targets, employment, and criteria.

4) Execution matrix for obstacles.

5) Obstacles (division directed, Bde directed, locations, responsibility for emplacing, and emplaced obstacles).

6) Resource requirements.

7) Engineer linkup with maneuver units, FA units (as appropriate).

8) Countermobility and survivability timelines.

9) Class (CL) IV and V (obstacle) distribution plan.

e. Operations overlay.

1) Maneuver scheme and concept of the operation.

2) Maneuver control measures.

3) Objectives.

4) Main and supporting efforts.

5) Employment of reserves.

6) R&S operations.

7) Force protection operations.

8) FSCMs.

9) Movement plan.

f. Administrative and logistics annex and overlay.

1) Location and disposition of the brigade support area (BSA).

2) Combat service support (CSS) overlays with critical information about:

a) Main supply route (MSR) and alternate supply routes (ASRs).

b) Locations (current and planned) for supply points.

c) Medical positions (casualty collection points, ambulance transfer points [ATPs], aid station locations).

d) Logistic release points (LRPs).

e) Maintenance unit locations.

3) CSR.

4) Transportation plan and schedule.

5) Logistics priorities and allocation of supplies, by unit and type of support and supplies.

6) Maintenance timelines.

7) Maintenance priorities by unit, type of weapons system, vehicle, equipment.

8) Established controlled exchange procedures.

9) Medical evacuation (MEDEVAC) plan.

10) Personnel plan.

g. Air defense annex.

1) Concept of air defense operations.

2) Active air defense guidance.

3) Passive air defense guidance.

4) Air defense warning (ADW) system.

h. NBC defense operations annex and graphics.

1) Enemy NBC capabilities.

2) Known and suspected contaminated areas.

3) Operation exposure guide (OEG).

4) Mission oriented protective posture (MOPP) guidance.

5) Decontamination sites.

i. Electronic warfare (EW) annex.

1) Concept of operation (offensive and defensive).

2) Tasks to subordinate and supporting units.

3) Coordinating instructions.

j. A2C2 annex.

1) Commander's guidance for A2C2.

2) Tasks to supporting air traffic control (ATC) organizations.

3) Air defense artillery (ADA) warnings, weapons control status (WCS), and rules of engagement (ROE).

4) Rules of flight.

5) Coordinating altitudes.

6) Liaison.

7) Friendly and hostile aircraft data.

8) Routes and corridors.

9) Restricted areas.

10) FSCMs (ACAs, etc.).

k. Army aviation annex.

1) Aviation concept of operation.

2) Joint air attack team (JAAT) guidance.

3) Suppression of enemy air defenses (SEAD).

4) Timeline for Army aviation operations.

l. Signal operations annex.

1) Concept of signal operations (including priorities).

2) Tasks to subordinate and supporting signal units and elements.

3) Coordinating instructions.

m. Rear operations annex.

1) Enemy threat (capabilities and levels).

2) Concept for rear area combat operations (RACO) and area damage control (ADC) including graphics.

3) Tasks to subordinate and supporting units.

4) Coordinating instructions.

a) RACO and ADC.

b) Civil-military.

c) FSCMs.

n. Military police (MP) annex.

1) Concept of MP operations (including priorities).

2) Tasks to subordinate units.

3) Coordinating instructions.

a) Coordination and cooperation with civil authorities.

b) Rear operations.

c) Enemy prisoners of war (EPW) operations.

d) Law and order operations.

e) Battlefield circulation control (BCC).

o. Civil affairs annex.

1) Concept for civil affairs (including priorities).

2) Civil affairs tasks to subordinate and supporting units.

3) Coordinating instructions.

p. OPSEC annex.

1) Enemy capabilities.

2) Concepts of OPSEC.

3) Tasks to subordinate units.

4) Countermeasures.

5) Counterintelligence (CI).

6) Coordinating instructions.

q. Movements annex.

1) MSRs.

2) Routes and schedules.

3) Traffic flow and control.

4) Rest and refuel areas.

r. Psychological operations (PSYOP) annex.

s. Decision support template (DST).

1) Enemy events, activities, and targets.

2) Friendly events, activities, scheme of maneuver, and control measures (from synchronization matrix and operations overlay).

3) CCIR.

4) Estimates of time available to implement decisions which lead to critical decision requirements.

5) Significant locations and events: (NAIs, time-phased lines [TPLs], decision points [DPs], TAIs, and triggers [event to cause action]).

t. Synchronization matrix.

1) Decision at each TPL.

2) Enemy actions and activities.

3) Friendly dispositions and actions.

Bde - 3 BDE TSOP

a. Succession of command.

b. CP organization and operation.

c. Orders process (including products developed).

d. War game procedures.

e. LNO procedures and responsibilities.

f. Alarms and warning procedures.

g. Fixed call signs and code words.

h. Road march procedures.

i. Assembly area operations.

j. OPSEC and security measures.

k. A2C2 operations.

l. Communication system distribution and operations (LAN, WAN).

m. Time requirements for submission of reports and requests.

n. Target numbering system.

o. Laser pulse repetition frequency code distribution.

p. Attachment and detachment procedures.

q. Logistics operations.

r. Brigade targeting team activities and targeting process.

s. Information management procedures (e.g., dissemination, logs, and journals).

t. Brigade rehearsal procedures.

u. Fratricide countermeasures and clearance of fires procedures.

v. CP SOPs.

Bde - 4 **GUIDANCE AND INFORMATION FROM THE BDE COMMANDER AND STAFF**

a. Oral orders and guidance from the Bde Cdr, XO, S3 or FSO.

b. Intelligence products from Bde S2.

1) Enemy artillery capabilities (e.g., ranges, system types, systems capabilities).

2) Bde intelligence preparation of the battlefield (IPB).

3) Bde MCOO.

4) Enemy NBC capabilities.

5) Enemy air defense capabilities.

6) Location and composition of enemy obstacles.

7) Enemy air routes.

8) Enemy air assets availability.

9) Known and suspected enemy locations.

10) Enemy OB (e.g., size, type, strength) for enemy units the brigade is expected to encounter.

11) Terrain analysis of battlespace (mobility corridors, avenues of approach).

12) Templates (situation, event).

13) Weather.

14) Bde information collection systems/sensors availability.

c. SITREPs from Bde S3.

d. Deconfliction of terrain requirements from Bde S3.

e. Commander's target attack criteria from Bde Cdr.

f. Fire support plan and target list, HPTs, FSCMs, FSEM, attack guidance matrix (AGM) from Bde FSO and targeting team.

g. Maintenance, transportation, and supply updates from Bde S4.

h. Bde obstacle plan from assistant brigade engineer (ABE).

i. Bde CSS information.

1) Current and projected classes of supply status for fire support units.

2) Current and projected maintenance status of fire support and collection systems.

3) CL V availability and resupply status.

4) Task organization of CSS assets to fire support units.

5) Transportation assets and capabilities to support fire support units.

6) RSR, CSR.

7) Status of MSR/ASR.

8) Status and locations of CSS nodes.

Bde - 5 INTELLIGENCE SUMMARIES, SPOT REPORTS

a. Enemy artillery capabilities (e.g., ranges, system types, systems capabilities).

b. Enemy NBC capabilities.

c. Enemy air defense capabilities.

d. Location and composition of enemy obstacles.

e. Enemy air routes.

f. Enemy air assets availability.

g. Known and suspected enemy locations.

h. Enemy order of battle (OB) (e.g., size, type, strength) for enemy units the Bde is expected to encounter.

i. Terrain analysis of battle space (mobility corridors, avenues of approach).

j. Templates (situation, event).

k. Weather.

l. Bde information collection systems and sensors availability.

FA - 1 FA BN TSOP

a. Battle command procedures.

1) Succession of command.

2) Alternate CPs.

3) Displacement of CPs.

4) CP security.

5) Orders and plans.

6) CP organization and layout and shifts.

7) CP communications.

8) Reports.

9) Rehearsals.

a) Fire support (FS) rehearsals.

b) Technical rehearsals.

b. Control procedures.

1) LNO procedures.

2) Brevity codes.

3) Terrain index reference system.

4) Recognition techniques.

5) Signals.

6) Alarms and warnings.

7) Readiness conditions.

8) Fixed call signs.

c. Tactical movements procedures.

1) Hasty displacement.

2) Survivability moves.

3) Passage of lines.

d. Assembly area procedures.

e. Air defense procedures.

1) ADWs.

2) WCS and guidance.

3) ROE.

f. Signal procedures.

1) Communications security (COMSEC) procedures.

2) Anti-jamming procedures.

3) Maintenance.

g. Intelligence and security procedures.

1) General guidance.

2) NAI and TAI procedures.

3) Document security.

4) Personnel security.

5) EPW procedures.

6) Captured document and equipment procedures.

h. NBC procedures.

1) MOPP guidance and analysis procedures.

2) Required NBC teams.

3) Alarms and warnings.

4) Reporting and marking procedures.

i. Fire support procedures.

1) Target numbering.

2) Laser code assignments.

3) Target-reference point (TRP) standards.

4) A2C2 procedures.

j. Survey procedures.

1) Position azimuth determining system (PADS) and global positioning system (GPS).

2) Conventional.

3) RSO plan.

4) Simultaneous observation procedures.

5) Hasty survey procedures.

k. Fire direction procedures.

1) Manual and digital fire order.

2) Tactical fire direction system (TACFIRE), improved fire support automated system (IFSAS), advanced field artillery tactical data system (AFATDS) SOP.

3) Digital and manual interface procedures.

4) Management of muzzle velocity (MV).

5) Clearance of fires.

l. Radar operations.

1) Positioning and movement.

2) Communications, digital and voice.

3) Cueing.

4) Radar zones.

m. Firing battery operations.

1) Occupations, deliberate and hasty.

2) Ready-to-fire standards.

3) Reports.

4) Force protection.

5) Battery operations center (BOC) operations.

6) Communications, digital and voice.

7) Load plans.

8) Position improvement procedures.

9) Movement procedures.

10) Reconnaissance, selection, and occupation of position (RSOP) procedures.

n. Logistics procedures.

1) Trains, combat and field.

2) Reports.

3) Reorganization and reconstitution.

4) Supply.

5) Services.

6) Transportation.

7) Refueling on the move (ROM).

o. Personnel procedures.

1) Reports.

2) Replacement operations.

3) Casualty reporting.

4) Postal.

5) Finance.

6) Health service support (HSS).

(a) Battalion aid station (BAS).

(b) Ambulance exchange points (AXPs).

7) MEDEVAC procedures.

8) Legal.

9) Public affairs.

10) Religious.

p. Civil-military operations (CMO) procedures.

FA - 2 INFORMATION FROM FA BN SUBORDINATE ELEMENTS AND OTHER UNITS

a. Spot reports (SPOTREPs).

b. Intelligence spot reports. (Size, activity, location, unit, time, equipment [SALUTE]).

c. Logistics reports.

d. XO's reports.

e. NBC reports.

f. Bottom-up refinement of fire plans, target lists, and final protective fires (FPFs).

g. FIST and forward observer (FO) SITREPs.

h. Survey party SITREPs.

KEY OUTPUTS

FA - 3 FA BN WARNO

a. HEADING

1) References (Maps, charts, and other relevant documents).

2) Time zone used throughout the order.

3) Task organization.

b. SITUATION

1) Enemy forces. (Include significant changes of information.)

2) Friendly forces.

a) Higher headquarters and supported unit missions.

b) DIVARTY and supported Bde commanders' intents.

c) Bde concept of operation.

d) Missions of units to the immediate left and right.

e) Missions of other units with a significant bearing on the battalion.

3) Attachments and detachments.

c. MISSION of the battalion

d. EXECUTION

Intent of the battalion commander (if available).

1) Concept of operation (when available).

2) Tasks to batteries (when available).

a) Tasks to units for execution.

b) Movement to be initiated (time).

c) Reconnaissance to be initiated (time).

d) Security to be in place (time).

3) Tasks to trains (when available).

4) Coordinating instructions.

a) CCIR.

b) Risk guidance.

c) Deception guidance.

d) Timeline.

e) Guidance on orders and rehearsals.

f) Orders group meeting (attendees, location, and time) (when applicable).

g) Earliest time of movement and degree of notice.

e. SERVICE SUPPORT

1) Special equipment. (Requirements; coordinating instructions for transfer to using units.)

2) Transportation. (Requirements; coordinating instructions for pre-positioning of assets.)

f. COMMAND AND SIGNAL

1) Command. (Chain of command if different from battalion TSOP.)

2) Signal. (Current signal operating instructions (SOI); prepositioning of assets to support the operation.)

g. ACKNOWLEDGE (Statement directing acknowledgment of receipt and understanding.)

FA - 4 **FA BN OPORD - FA BN SUPPORT PLAN (FASP)** (May be written in five paragraph format, FA support matrix, FRAGO, or presented as oral orders as time allows. Appendix to Bde order.)

a. HEADING

1) Security markings.

2) Confirmation statement in regard to oral orders.

3) Copy number.

4) Issuing headquarters.

5) Place of issue.

6) Date and time order is signed.

7) Message reference number.

8) Number.

9) Code name (if applicable).

10) Map references.

11) Time zone order is executed.

b. TASK ORGANIZATION:

1) Lists major subordinate headquarters in the correct sequence.

2) Qualifies relationships other than attachment by parenthetical terms such as operational control, general support (GS), or DS.

3) Uses task organization matrix if desired.

4) Allocation of all FA assets.

5) Projected changes to the allocation of FA assets based on tactical contingencies.

c. SITUATION

1) Enemy forces:

a) In sketch form rather than a verbal description when possible.

b) Refers to intelligence annex, intelligence overlay, intelligence report, or intelligence summary. (Use an intelligence annex only if there is enough information to make an annex necessary).

c) Provides an assessment of the terrorist threat to the command.

2) Friendly forces:

a) Includes mission of higher unit and information concerning higher, adjacent, supporting, and units.

b) Discusses units essential to the operation.

c) States higher commander's concept and intent.

d) Provides for minimizing chance of fratricide.

e) Lists attachments and detachments:

(1) Does not repeat information under "task organization."

(2) Indicates "see task organization" if task organization used.

(3) States when attachment and detachment is to be effective.

d. MISSION

1) States the task and its purpose.

2) Outlines essential tasks determined by the commander.

3) Contains the elements of who, what, when, where, and why.

e. EXECUTION

1) Concept of operation. A brief paragraph, written by the battalion commander, that:

a) States the commander's vision of the operation.

b) Describes the purpose of the operation.

c) Describes how the commander visualizes achieving the endstate with respect to the relationship between the force as a whole, the terrain, and the enemy.

d) States how the endstate will facilitate future operations.

e) Does not summarize the concept of operation or describe subunit missions.

2) Organization for combat. (Contains organization, tactical missions and on-order missions.)

3) Fires:

a) Describes "concept of fires" to support overall concept, including chemical and other special purpose munitions within the battlefield framework.

b) States priority of fire support.

c) Includes time and duration of preparatory fires (if applicable).

d) Refers to fire support annex if used.

e) Designates priority use of low-density munitions; priority as to type of fires, preparatory fires, and illumination (time and duration as appropriate).

4) Positioning and movement instructions.

5) Specific tasks to be accomplished by specific sub-elements.

6) Coordinating instructions.

a) Target acquisition.

b) Survey (includes priorities, accuracy required, timing, position requirements, and future plans).

c) HPT list.

d) AGM.

e) NBC defense (includes MOPP, OEG, and decontamination instructions).

f) Meteorological messages (source, type, and times).

g) Fire plan (includes target list and schedule of fires).

h) FSCM.

i) PIR and or IR.

j) Intelligence acquisition tasks.

k) Ammunition restrictions.

l) Radar deployment order (RDO) for reinforcing headquarters.

f. SERVICE SUPPORT

g. COMMAND AND SIGNAL

h. COMMON TABS: FA support matrix, target lists, fire plan, survey tab, target acquisition tab, TACFIRE tab, FA positioning and or movement.

FA - 5 FA BN SUPPORT MATRIX

a. Unit essential tasks. (Who, what, when, where.)

b. Trigger events.

FA - 6 FA BN SITREPS

a. Fire support systems available.

b. Current and projected status (e.g., cannons, ammunition, FDCs, radars).

c. Current FA unit and systems locations.

d. Number, type, and status of FA units supporting the DS FA battalion.

e. Munitions capabilities.

1) Ammunition supply points' locations.

2) Ammunition and propellant availability.

a) Quantity, by type (e.g., precision guided munitions [PGM], FASCAM, rocket assisted projectile [RAP]).

b) Fuses and charges availability.

f. Status on movement plans, terrain requirements, and position requirements for fire support assets.

g. Observer and observer location requirements.

h. Status of division directed missions, and allocation and positions of division assets in the brigade sector.

i. Transportation requirements.

j. Communications requirements.

k. Status of digital systems.

l. Status of PADs and GPS.

m. Target attack systems capabilities.

n. Jamming requirements.

o. Rear area fire support capability (assets available to provide support, areas requiring support).

p. Current and projected classes of supply status for fire support units.

q. Status of MSR/ASR.

r. Status and locations of CSS nodes.

FA - 7 GUIDANCE AND INFORMATION FROM THE BATTALION COMMANDER AND STAFF

a. Oral orders and guidance from the battalion commander, XO, and S3.

b. Operations reports.

c. Intelligence reports.

d. Logistics reports.

e. Personnel reports.

TASK LIST SUMMARY

This component provides a summary of the first level of tasks on the task list.

1. **The direct support field artillery battalion commander directs and leads subordinate forces.**

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.**

3. **The direct support field artillery battalion commander visualizes the battlefield.**

4. **The direct support field artillery battalion commander directs changes to the operation or plan.**

5. **The direct support field artillery battalion command posts manage and maintain command, control, and communications.**

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.**

TASK LIST

The purpose of this component is to identify, organize, and list in logical sequence all of the tasks and subtasks necessary to perform this function. Normally, the primary participants responsible for performing the task are identified. The tasks were extracted from the appropriate doctrinal publications and sources. The specific sources of reference for each task and subtask are shown in brackets [ ] following the task.

In many instances, the wording of the task has been changed from the text found in the Army Training and Evaluation Program - Mission Training Plan (ARTEP-MTP) or Field Manual (FM) to add clarity, context, or meaning. The references allow the user to refer to the original source material for further detail and context, if desired.

For tasks selected from an ARTEP-MTP, the task number has been expanded with a slash (/) to identify the subtask and standard reflected in the ARTEP-MTP task. To illustrate: a task referenced as [ARTEP 71-3-MTP, 71-3-4001/4c] was derived from ARTEP 71-3-MTP, the Mission Training Plan for the Heavy Brigade Command Group and Staff, and identifies brigade S4 section task "71-3-4001, Conduct Logistical Planning," subtask "4," "Prepares plans and orders," standard or sub-element "c."

For tasks derived from an FM, the FM number and page number have been provided as a reference. For example, the reference for a task "The brigade commander demonstrates understanding of mission and higher commander's intent during confirmation briefing to the division commander" would be [FM 101-5, p. 1-9].

Some tasks and subtasks needed to define the function are not contained in ARTEP-MTPs nor can they be derived from FMs. Tasks and subtasks were identified to fill such gaps and were developed during coordination visits with various TRADOC schools, Forces Command (FORSCOM) units, and Combat Training Centers (CTCs). These tasks are listed as field notes [FN] and are annotated with their source. For example, tasks identified by CSS Observer-Controllers (OCs) at the National Training Center (NTC) would be referenced as [FN-NTC CSS OCs]. Still other tasks and subtasks were identified based on review of newsletters and other documents published by the Center for Army Lessons Learned (CALL) which capture lessons learned from Army units relevant to doctrine, tactics, techniques, and procedures (D,T,T,P). Tasks derived from CALL publications are referenced as Lessons Learned [LL] with the appropriate document and page number provided. For example, a task extracted from CALL Newsletter 95-6, "National Training Center's 'Fighting with Fires'" is referenced as [LL-CALL Newsletter 95-6, p. 16].

In some cases, the analysis of the BF resulted in the identification of tasks for which no doctrinal references could be determined. Such tasks were selected based on author experience and a careful study of relevant doctrine. These tasks are referenced as author notes [AN].

Full references for all the source material are listed in the reference section.

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

a. The DS FA battalion commander directs subordinate forces.

1) The DS FA battalion commander takes actions to ensure that subordinate leaders have a clear understanding of his intent and concept. Actions include: [FM 101-5, Chap 1, 4, App B, D, H, J; Battle Command Techniques and Procedures, (April 21, 1995), Chap 2, 4; Battle Command, pp. 10-32]

a) Meeting with subordinate commanders and leaders to receive information and issue directions.

b) Evaluating reports from subordinates for understanding of his intent, concept of operations, and their missions.

2) The DS FA battalion commander positions himself on the battlefield where he can best fulfill both his responsibilities as the FSCOORD to the brigade commander and as the DS FA battalion commander.

a) As the brigade FSCOORD, positions himself where he can best influence the battle and assist the brigade commander in integrating and coordinating indirect fire support.

(1) With the brigade commander.

(2) In the FSE.

b) As the DS FA battalion commander, when required, is in the DS FA battalion area to best exercise his commander duties.

c) Delegates specific duties to his XO and S3 to provide for freedom of movement to execute his duty as brigade FSCOORD.

b. The DS FA battalion commander ensures that each battlefield operating system (BOS) is integrated and coordinated with other BOS during delivery of fires and execution of battle. [FM 101-5, pp. H-36 - H-42]

1) The DS FA battalion commander integrates intelligence requirements with the other BOS.

a) The DS FA battalion commander, brigade targeting officer, brigade FSO, and DS FA battalion S2 review information to ensure that FASP and decision aids are revised on a continuous basis as the battlefield situation changes.

(1) Decision support template (DST).

(2) Enemy situation template (SIT TEMP).

b) The DS FA battalion S2 processes information and disseminates updated intelligence of enemy situation, terrain, and weather.

(1) Descriptions and locations of obstacles, fortifications, and known or potential contaminated areas and enemy NBC delivery systems.

(2) Threat locations (CPs, weapons systems), strengths, capabilities, probable boundaries, known vulnerabilities, and threat probable COAs and intentions.

c) The DS FA battalion commander manages the detection effort to acquire and engage HPTs.

(1) Verifies that means are available to detect and track HPTs.

(2) Ensures that responsibility for the attack of critical HPTs has been assigned and that the responsible agency is prepared to execute with the assigned trigger.

(3) Confirms a backup attack system for each critical HPT.

(4) Verifies that assessment assets linked to critical HPTs are available as needed.

(5) Informs assessment asset managers as HPT refinements or attack times and measures change.

(6) Verifies that target intelligence from assessment is incorporated into overall enemy situational development.

2) The DS FA battalion commander integrates and coordinates fire support with maneuver.

a) The FSEM is reviewed to ensure that adjustments and refinements in the maneuver plan are continuously addressed by refinements in the fire support plan if necessary.

b) The AGM is reviewed and updated as necessary to reflect any changes in the brigade commander's guidance for attack of critical targets by phase of maneuver or as a result of changes in the maneuver plan.

c) FSCMs are reviewed to ensure that the rapid engagement of targets is facilitated while simultaneously safeguarding friendly forces.

d) Supported brigade targeting process information requirements are met with current information.

3) The DS FA battalion commander integrates and coordinates fire support with the other BOS.

a) The FA support plan (FASP) is coordinated with the brigade fire support plan.

(1) Changes and refinements to the fire support plan as a result of changes in the tactical situation or as a result of changes to the brigade plan must be integrated through FSCMs with the maneuver plan.

(2) Last minute modifications to the plan must be approved by the brigade commander through the FSCOORD.

(3) The DS FA battalion commander must ensure that procedures are in place that allow the staff to quickly assess and respond to new information.

(4) The DS FA battalion S3 and S2 in conjunction with the brigade fire support cell will assess new information for the following:

(a) Accuracy and reliability.

(b) Whether target information meets target selection standards.

(c) Whether the new information requires substantial changes to the existing fire support plan.

(d) The best method of attack (FA mortars, close air support [CAS], etc.)

(5) Staff members, based on their assessments, will:

(a) Change the schedule of fires or preplanned target list by substituting higher priority targets.

(b) Delete suspected targets.

(c) Designate on-call targets.

(d) Shift fires from planned targets.

b) The brigade fire support plan is reviewed for refinements, to include:

(1) Shifts in priorities of fires and timing for preplanned and targets of opportunity engagements in each phase of the operation.

(2) Repositioning of primary and back-up observers to allow observation on all priority targets and engagement areas as information on the enemy changes.

(3) Priority of fires and priority targets for each phase of the mission, including method for prioritizing calls for fire.

(4) Artillery target groups and series are refined and updated based on the tactical situation and staff assessment of information received.

(5) Employment concept for special munitions (i.e., FASCAM, smoke, dual purpose improved conventional munitions [DPICM], Copperhead) is synchronized with any changes to the maneuver plan.

(6) CAS and Army aviation employment are coordinated with field artillery fires by implementation of ACAs.

(7) CAS, Army aviation, and field artillery support are synchronized for the conduct of JAAT missions and to provide SEAD fires during the battle.

(8) Control measures and restrictions are modified to support changes in the tactical situation.

(9) Electronic warfare (EW) attack measures are integrated with lethal attack measures to increase the synergistic effects against the targets.

(10) Naval surface fires, as available, are integrated with all other lethal and nonlethal attack measures.

4) The DS FA Cdr integrates and coordinates mobility/countermobility/survivability with the other BOS.

a) Verifies that fires are planned to cover all obstacles and that responsibility for triggering those fires is coordinated between the maneuver forces and their fire support representatives.

b) Coordinates requirements for delivery of FASCAM with battery movement plans, requirements to service other HPTs, and ammunition resupply requirements.

c) Coordinates requirements for engineer support to DS FA units for position improvement and survivability enhancements.

d) The battalion CMLO coordinates decontamination support and site location with the brigade CMLO.

5) The DS FA battalion commander integrates and coordinates air defense with the other BOS.

a) Verifies that the DS FA battalion S2 has conducted a three dimensional intelligence preparation of the battlefield (IPB).

b) Verifies that the DS FA battalion S3 has integrated that IPB into the position area overlay and updates the position area overlay as the air threat changes or ADA positions change.

c) Verifies that the DS FA battalion S3 has considered incidental coverage by ADA elements deployed in the brigade area in the development of the FASP.

6) The DS FA battalion commander integrates and coordinates CSS with the other BOS.

a) Verifies that CSS assets are positioned and are providing planned supply, medical, and maintenance support to the DS FA battalion during the mission, without interfering with the DS FA battalion delivery of fires.

b) Verifies that push packages of emergency resupplies are configured and ready.

c) Reviews designated MSR and ASRs to ensure that CSS assets continue to provide timely response.

d) Verifies that medical assets and operations are supporting the DS FA battalion.

e) Ensures that vehicles and equipment are being recovered, repaired, and returned to the user or delivered to higher maintenance echelons.

f) Verifies maintenance assets are task organized and are providing support.

g) Verifies that unit maintenance collection points (UMCPs) are in position and are providing support necessary to sustain fires.

7) The DS FA battalion commander integrates and coordinates command and control with the other BOS.

a) The DS FA battalion commander monitors the DST, synchronization matrix, AGM, and FSEM to ensure that:

(1) Modifications to the brigade plan and fire support plan are integrated.

(2) Mission details to achieve the brigade commander's intent are adequately reflected.

(3) Fire support is massed:

(a) Against the enemy.

(b) At the decisive point and time as visualized by the brigade commander.

b) Command and control measures are reviewed by the DS FA battalion commander, staff, and subordinate leaders to ensure that changes in the tactical situation are incorporated into all DS FA battalion documents; at minimum:

(1) Maneuver graphics and control measures (e.g., phase lines, objectives, routes, check and coordination points).

(2) Signals and quick execution code words.

(3) DST.

(4) Synchronization matrix.

(5) FSEM and FSCM.

c) CPs and staff continue to support the mission.

(1) Receive, process, and disseminate information.

(2) Move and position to support the DS FA battalion commander during the battle.

(3) Coordinate and integrate combat multipliers.

(4) Exchange information with brigade HQ, DIVARTY HQ, and CP of reinforcing FA battalion.

c. The DS FA battalion commander maintains unit cohesion and discipline during the execution of the battle by: [Battle Command, Leadership and Decision Making, p. 11-15, FM 22-100, Chap 4, 5, 6]

1) Checking to ensure that orders are executed and reinforcing discipline by demanding compliance to standards and his guidance.

2) Observing subordinates:

a) For indicators of shortfalls in performance or manner of performance; takes corrective action as necessary.

b) For noteworthy performance that he can praise and recognize.

3) Displaying a calm presence to subordinates while clearly delineating guidance and providing precise, simple orders and instructions.

4) Maintaining a moral presence through ethical decision-making and personal example.

5) Monitoring subordinates and himself for degradation of mental and physical capability. [Battle Command, Leadership and Decision Making, pp. 27, 28]

a) The DS FA battalion commander monitors his own physical and mental state and gets rest.

b) The DS FA battalion XO monitors the DS FA battalion commander's and staff members' physical and mental state and recommends rest periods.

c) The DS FA battalion commander ensures that battery commanders and DS FA battalion staff get necessary rest and are prepared for battle.

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.** [TRADOC Pam 11-9, Section IV; Battle Command, pp. 43 and 65;

ARTEP 6-115-20-MTP; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]

a. The DS FA battalion CPs acquire information to assist the DS FA battalion commander. [TRADOC Pam 11-9, Chap 7 and App D]

1) The DS FA battalion staff members, operating out of the DS FA battalion tactical operations center (TOC) directed by the DS FA battalion commander or the DS FA battalion SOP, obtain information during the execution of the battle that is:

a) Critical in assisting the DS FA battalion commander to integrate and coordinate execution of fire support for the brigade. [FM 101-5, pp. 6-33, 6-34]

b) Focused on satisfying the DS FA battalion CCIR, PIR, and IR. [FM 101-5, pp. 6-8, 6-11, 6-16, and C-4]

2) The DS FA battalion S3 manages the flow of information in the DS FA battalion TOC and establishes a system to keep the DS FA battalion commander informed. [FM 101-5, pp. 6-2, 6-11, 6-34; ARTEP 6-115 MTP, Task 06-3-01-2110]

3) All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]

a) Focus information collection according to CCIR, PIR, and IR, and immediately communicate any response to CCIR to the DS FA battalion commander, XO, and S3. [FM 101-5, pp. 6-8, 6-11, 6-16, C-4]

b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's execution of fire support for the brigade battle in order to: [FM 101-5, pp. 6-33, 6-34]

(1) Monitor and modify activities as necessary.

(2) Verify/modify coordination between the DS FA battalion and adjacent units.

c) Provide appropriate recommendations to the DS FA battalion commander relative to their functional areas. [FM 101-5, pp. 6-33, C-2]

d) Continually coordinate with each other personally and with external headquarters to exchange needed information. [FM 101-5, pp. 3-84, App A]

4) The DS FA battalion CSM obtains information during visits and inspections, and advises the DS FA battalion commander on: [AN]

a) Morale, discipline, and adherence to standards by DS FA battalion soldiers.

b) Capability of the DS FA battalion to sustain fire support.

c) Assessment of the CSS system.

d) Assessment of the welfare of DS FA battalion soldiers.

e) Other duties or information requested by the DS FA battalion commander.

5) The DS FA battalion S2 section obtains intelligence information related to integrating and coordinating fire support for the brigade: [FM 101-5, pp. C-7, C-8; FM 34-130, Chap 2]

a) Information from brigade S2's intelligence products and DS FA battalion staff: [FM 6-20-1, pp. 3-10, 3-12]

(1) Changes from the DS FA battalion commander to guidance and mission concept, and his requirements for intelligence information determined during delivery of fires, and the assessment of battle damage and target attack criteria.

(2) Intelligence summaries (INTSUMs) and spot reports from brigade, DIVARTY, and division staff.

(3) Information from brigade, DIVARTY, and adjacent units based on previously submitted information queries.

(4) OPSEC reports from the DS FA battalion S3/operations section and subordinate units which contribute to the analysis of DS FA battalion security posture.

(5) Updates from the brigade S2 on enemy activity based on reports from the divisional military intelligence battalion.

(6) Information on the current situation learned by eavesdropping on brigade, DIVARTY, and adjacent unit command, operations, and intelligence (O&I) nets.

(7) Information from the battalion commander in his role as FSCOORD.

(8) Information from the brigade FSO, Bn TF/company FSO, and respective FSEs.

b) From subordinate units: [ARTEP 6-115-MTP, Task 06-3-01-2512]

(1) Information from FIST/FSO/combat observation/lasing team (COLT) teams.

(2) Information from survey parties.

(3) Information from battery defense observation posts /listening posts.

(4) Information from battery advance parties and position area reconnaissance.

(5) Information from radars attached to or organic to or otherwise supporting the DS FA battalion.

c) From DS FA battalion special staff officers. [FM 101-5, App A]

d) From LNOs from/to higher, adjacent, and supporting units. [FM 101-5, App L]

e) Information from other sources such as:

(1) Aerial photographs.

(2) Prisoners, deserters, and civilian population.

(3) EW, radars, and sensors.

(4) Unmanned aerial vehicles (UAV).

(5) Tracking of HPTs by brigade collection assets.

(6) Battle damage assessment (BDA) and post strike analysis of targets attacked.

6) DS FA battalion S3 section obtains operations information related to integrating and coordinating fire support for the brigade (e.g., changes to mission, enemy, troops, terrain and time (METT-T), and status of BOS). [FM 101-5, pp. C-8, C-9; ARTEP 6-115-MTP, Task 06-3-01-2120]

a) From the brigade commander and staff. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120]

(1) Direction from the brigade commander to the FSCOORD or brigade FSO pertaining to:

(a) Changes to mission concept or details of the plan.

(b) Requirements for information determined during battle.

(c) Other guidance and directives.

(2) FRAGOs/WARNOs from brigade.

(3) Situation updates from brigade and DIVARTY staff.

(a) SITREPs.

(b) Responses on queries and requests submitted by the DS FA battalion.

(c) Changes to the brigade situation which necessitate changes to the DS FA battalion OPSEC posture.

(d) Changes to the enemy situation (e.g., enemy reconnaissance activity, EW activity).

(e) Changes to requirements for support provided such as met, radar, and positioning of general support (GS) artillery.

(4) Division and corps units allocated terrain in the brigade AO.

b) From subordinate DS FA battalion units. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2150]

(1) Reports from subordinate DS FA battalion units.

(a) Reports of reconnaissance of position areas.

(b) Enemy contact.

(c) Current and projected strength and combat power.

(d) Battery XO reports.

(e) OPSEC reports.

(f) Results of local security operations.

(2) Requests for resources from subordinate DS FA battalion units based on their mission analyses and determination of their needs to accomplish their assigned tasks.

(3) Recommendations from battery commanders on changes to the FASP based on their current status and projected status.

c) From DS FA battalion staff officers and LNOs. [ARTEP 6-115-MTP, Task 06-3-01-2120; FM 101-5, App A]

(1) Information from the DS FA battalion S2 and intelligence section which confirms or refutes the operations estimate of the situation required to achieve the DS FA battalion commander's intent.

(2) Updates from the DS FA battalion S1 and S4.

(a) Personnel and unit status.

(b) Vehicle and equipment status.

(c) Status of all classes of supply.

(3) Updates from the DS FA Bn SO on the status of DS FA battalion communications links and systems.

(4) Updates from the DS FA battalion CMLO on the status and planned employment of chemical units.

d) Brigade FSE, DS FA Bn staff, Bn TFs FSOs, and other elements operating in the Bde AO submit reports necessary to deconflict terrain requirements. [FM 101-5, Chap 3]

7) The DS FA battalion FDO and FDC section obtain information related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-3-02-2320; FM 6-20-1 pp. 3-3; FM 6-40, FM 6-40A]

a) Changes from the DS FA battalion commander, DS FA battalion S3, and brigade FSO to brigade commander's guidance and mission concept and requirements for information to assist in the development of the DS FA battalion commander's criteria.

b) Intelligence information from the DS FA battalion S2, brigade FSE, and DIVARTY S2 via IFSAS/AFATDS artillery target intelligence (ATI) files.

c) Changes from the brigade FSO, DS FA battalion S3, and Bn TF FSOs to preplanned and scheduled fires as a result of changes to the brigade tactical situation.

d) Changes to firing parameters.

(1) Met updates

(2) Survey refinements.

(3) Registration data.

(4) Target location information.

e) Updated information from battery FDCs.

f) Requirements for subsequent attack of HPTs based on BDA provided by the S2.

8) The brigade FSCOORD, brigade FSO, and brigade FSE section obtain fire support information related to integrating and coordinating fire support for the brigade. [FM 6-20, pp. 2-22, 2-23; FM 6-20-40, Chap 4; ARTEP 71-3-MTP, Task 71-3-9002/1b, 9003/1a; 9004/1a]

a) Changes from the brigade commander to guidance, mission concept, and information requirements.

b) Changes to the tactical situation.

c) Intelligence information from the DS FA battalion S2, brigade S2, division FSE, and DIVARTY TOC.

(1) Enemy capabilities to attack the DS FA battalion with direct or indirect fires.

(2) Responses to information and intelligence queries previously submitted by the DS FA battalion.

(3) Target acquisition assets and plans related to tracking of HPTs.

d) FA status from DS FA battalion S3.

(1) Current and projected locations of DS FA battalion and reinforcing units.

(2) Current and projected unit weapons status.

(3) Current and projected ammunition status.

e) FA status from DIVARTY and division FSE.

(1) Organization for combat (including general support [GS], general support reinforcing [GSR] FA).

(2) Locations and status of GS and GSR batteries and platoons.

(3) Status and locations of counter-battery radars.

(4) Status and timing of met support.

(5) Division or corps directed FSCM.

f) Task organization, personnel and equipment status, and status of execution of fire support plans from Bn TF FSOs.

(1) COLTs.

(2) FISTs.

(3) Mortars.

(a) Mortar tubes and vehicles.

(b) Personnel.

(c) Locations of sections and FDCs.

(d) Ammunition status.

1 Ammunition types.

2 Ammunition quantities.

g) Bottom-up refinements regarding projected locations, targets, FPFs, FSCM, and time-lines from:

(1) Maneuver Bn TF FSOs.

(2) Scout platoons.

(3) COLTs and other observers.

h) Availability and locations of EW assets from the DS FA battalion S2.

i) Information necessary to refine plans for coverage of obstacles and adjustments to FASCAM employment from the brigade engineer.

j) Fire support requirements from the DS FA battalion S4 and forward support battalion (FSB) commander to support the BSA.

9) The DS FA battalion RSO obtains information concerning the DS FA battalion survey operations regarding integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-8-02-2700; FM 6-2, pp. 15-13, 14]

a) Changes from the DS FA battalion commander on survey priorities.

b) Intelligence data from the DS FA battalion S2.

(1) Enemy activity affecting survey operations.

(2) Impact of weather and terrain on survey capabilities.

(3) Requirements for survey to link sensor information.

(4) Impact of NBC hazards on survey operations.

c) Information from the DS FA battalion S3.

(1) Status of movement of the DS FA battalion and reinforcing units that may affect survey operations.

(2) Changes to task organization that affect survey priorities.

(3) Additional survey requirements from the brigade.

d) Status of DS FA battalion survey teams.

(1) Equipment.

(2) Personnel.

(3) Response to time-lines.

10) The DS FA battalion CMLO obtains information concerning friendly and enemy NBC status related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 03-3-C201, C202]

a) Changes from the DS FA battalion commander to guidance, mission concept, and information requirements.

b) NBC warning and reporting system updates from the brigade and DIVARTY.

c) Status and location updates for NBC equipment and supplies from subordinate units and the DS FA battalion S4.

d) Status and location of decontamination and reconnaissance assets from the brigade CMLO.

e) NBC monitoring and surveillance reports from subordinate DS FA battalion units.

f) Information from the DS FA battalion S2 and intelligence section which confirms or refutes the estimate of NBC threat and requirements.

g) Changes to brigade and subordinate DS FA battalion units' plans in terms of projected locations, decontamination requirements, and time-lines.

11) The DS FA Bn SO and communications section obtain information concerning DS FA battalion communications requirements and capabilities related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-8-01-4000, 06-4-01-4800, 06-1-01-4100]

a) Changes from the DS FA battalion commander to guidance, mission concept, and information requirements.

b) Status of communications links from DS FA battalion CPs to brigade, DIVARTY, reinforcing units, and other major subordinate command CPs.

c) Updates from subordinate DS FA battalion units on communications status.

(1) Status of communications links from DS FA battalion CPs.

(2) Equipment (e.g., secure and non-secure, digital, voice).

(3) Signal operating instructions (SOI).

(4) Availability of subordinate unit communications personnel and equipment.

d) Information from the DS FA battalion S2 and intelligence section.

(1) Information which confirms or refutes the estimate of communications requirements.

(2) Updates enemy electronic and communication capabilities that may impact on the use of directional antennae and net discipline.

e) Status reports from DS FA battalion retransmission (retrans) stations.

(1) Positioning.

(2) Equipment serviceability and capability.

(3) Communication ranges and dead spaces.

f) Information from the DS FA battalion XO and DS FA battalion S3 about changes to proposed DS FA battalion CP locations and projected time-lines.

g) Changes to Bn TF and subordinate units' plans in terms of projected locations and time-lines.

12) The DS FA battalion S1 section obtains information related to integrating and coordinating support for the brigade: [ARTEP 6-115-MTP, Task 12-1-C404; FM 101-5, p. C-5; FM 6-20-1, pp. 7-7, 7-21, 7-22]

a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and requirements for information.

b) Personnel status from subordinate and supporting units.

(1) Personnel status reports.

(2) Critical military occupational specialties and grade shortages.

(3) Absent without leave (AWOL).

(4) Casualty feeder reports.

c) Personnel information from DIVARTY S1 and division adjutant general.

(1) Availability of replacements and replacement operations. (including weapons system replacement operations [WSRO]).

(2) Postal services.

(3) Morale, welfare, and recreation (MWR) support.

d) Morale and discipline indicators from DS FA battalion special staff officers and battery commanders.

(1) Battery reports of stragglers, AWOLs, and absences from place of duty.

(2) Sick call and stress casualties from the DS FA battalion surgeon.

(3) Advice from the CSM on the state of morale and discipline.

e) FSB support capabilities from the FSB support operations center.

f) Information from the supported brigade MP platoon leader concerning EPW processing and evacuation requirements.

13) The DS FA battalion S4 section obtains information related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-3-01-6430; FM 101-5, p. C-9; FM 6-20-1, pp. 7-10, 7-11]

a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and information requirements.

b) Information from the DS FA battalion S2 and intelligence section which confirms or refutes estimates of the logistical situation.

c) Logistics reports from batteries and supporting units.

(1) Status of supplies by class of supply.

(2) Equipment readiness.

(3) Task organization and status of CSS elements:

(a) FSB.

(b) Field train CP/battalion supply operations center (BSOC).

(c) Combat trains CP/administrative and logistics center (ALOC).

(d) Maintenance, transportation, and supply updates from the brigade S4 and FSB support operations center (including plans for WSRO).

14) The DS FA battalion surgeon obtains information related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 08-3-C003; FM 6-20-1, pp. 7-23, 7-24]

a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and information requirements.

b) Updates on capabilities versus requirements for treatment.

(1) Patient load and disposition.

(2) Mass casualty situations requiring external assistance.

c) Capabilities of ground evacuation and aerial MEDEVAC from the brigade surgeon.

d) CL VIII supply status.

(1) Updates from the division medical supply officer on availability.

(2) On-hand quantities to meet current and anticipated requirements.

e) Additional medical support capability from the division main support battalion (MSB).

f) Supporting unit medical support status.

(1) Positioning and readiness of medical assets.

(2) Capability to receive, triage, and evacuate casualties.

g) Changes to supporting unit plans in terms of projected locations and times.

15) The DS FA battalion HHB commander obtains information necessary to support the TOC and the ALOC. [FM 6-20-1, pp. 3-1, 3-6, 7-1-10]

a) Obtains changes to the DS FA battalion commander's guidance, mission concept, and information requirements from the DS FA battalion S3.

b) Obtains information from the DS FA battalion S2 and intelligence section which confirms or refutes enemy threat to the TOC or ALOC.

c) Obtains anticipated movement times and projected locations for the TOC and ALOC from the DS FA battalion XO and S3.

d) Obtains information from attachments and supporting agencies concerning space, supply, and support requirements.

b. The DS FA battalion CPs evaluate acquired information, update products, and maintain status related to integrating and coordinating fire support for the brigade. [FM 6-20-1 p. 3-1; FM 101-5, Chap 6; ARTEP 6-115-MTP, Task 06-1-02-2500]

1) The DS FA battalion S2 and intelligence section evaluate intelligence information, and update IPB products. [ARTEP 6-115-MTP, Task 06-1-02-2500]

a) The DS FA battalion intelligence section tracks the enemy.

(1) Location (confirmed and suspected).

(2) Activity.

(a) Indications of possible intent.

(b) Enemy reactions to friendly battle techniques.

(c) Specific enemy actions triggered by friendly actions or events.

(3) Adherence to, or deviation from, postulated enemy COAs.

(4) Enemy losses are analyzed to determine strengths and capabilities.

b) The DS FA battalion S2 and intelligence section evaluate intelligence information. [ARTEP 6-115-MTP, Task 06-3-01-2512]

(1) Changes to guidance, direction, and information.

(2) Desired DS FA battalion endstates compared to current intelligence situation, trends, and IPB.

(3) Information which confirms or refutes IPB information relative to achieving the DS FA battalion commander's intent:

(a) Updates PIR related to fire support. [FM 6-20-1, p. 3-5]

(b) NAIs and TAIs.

(4) Positioning of assets to detect and track HPTs, provide observation for attack of HPTs, and provide report of target effects for BDA on HPT following attack.

(5) Indicators of changes in enemy intentions or reactions:

(a) NBC weapons usage or activity as prelude to offensive operations.

(b) Presence of reconnaissance forces as a prelude to attack.

(c) Conduct of counter-reconnaissance operations as an indicator of defense.

(d) Presence and massing of maneuver forces as the initiation of offensive operations.

(e) Increase of enemy helicopter activity as an indication of air assault operations.

(f) Increase in enemy fighter activity and massing of transport fixed wing aircraft as indicators of airborne assault or the start of offensive operations.

(g) Increase of enemy field artillery and rocket unit activity.

(h) Presence and nature of activity of enemy engineer systems.

(i) Meconing, interference, jamming, interception and other changes in enemy electromagnetic activity as prelude to offensive operations.

c) The DS FA battalion S2 and intelligence section update intelligence products. [ARTEP 6-115-MTP, Task 06-3-01-2510,2511]

(1) Updated intelligence estimate (may or may not be in written form).

(2) SIT TEMP.

(3) Event template.

(4) MCOO in coordination with the DS FA battalion S3.

(5) Intelligence portion of the DST.

(6) Intelligence collection plan.

(7) Intelligence database.

(a) Enemy OB.

(b) ATI file.

(8) Intelligence overlays and graphics.

(9) DS FA battalion INTSUMs.

(10) Intelligence journal/log.

(11) Ensures all subordinate and reinforcing elements are kept informed of the enemy situation.

(a) Firing batteries.

(b) Survey teams.

(c) Retransmission stations.

(d) Wire teams.

(e) Radars.

(f) ALOC.

(g) BSOC.

(12) Coordinates intelligence aspects of DS FA battalion ground and air defense plans with batteries. [FM 6-20-1, p. 3-5]

(13) Advises the DS FA battalion S3 on employment of any target acquisition resources organic or attached to the DS FA battalion and recommends sectors of search. [FM 6-20-1, p. 5-1]

2) The DS FA battalion S3 section evaluates operational information and updates operational products. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120, 2150]

a) The DS FA battalion S3 section evaluates information. [ARTEP 6-115-MTP, Task 06-3-01-2120]

(1) Changes to guidance/direction and information.

(2) Information which confirms or refutes IPB information which may affect achieving the DS FA battalion commander's intent.

(3) Desired DS FA battalion endstates are compared with what is possible based on the current DS FA battalion operational status, FASP, and trends.

(a) Battery status.

(b) CSS status.

(4) Impact of changes to the brigade maneuver plans on the FASP.

(5) Results of coordinating plans with brigade and subordinate fire support units. [FM 6-20-1, p. 3-5]

(6) DS FA battalion OPSEC based on information received from brigade and internal DS FA battalion sources.

b) The DS FA battalion S3 section updates operations products. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120, 2150]

(1) Maintains situation map (SITMAP), target planning maps, and fire support overlays, which reflect: [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(a) Movement, routes, and locations of collection and target acquisition assets. [FM 6-20-40, p. 2-23].

(b) Current friendly and enemy situation. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(c) Unit boundaries. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190].

(d) Locations of maneuver and artillery support elements. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(e) FSCM. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(f) FASCAM. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(2) Operational portion of the DST.

(3) Synchronization matrix.

(4) FSEM.

(5) MCOO based on input from the DS FA battalion S2 and CMLO.

(6) Updated operations estimate (may or may not be in written form).

(7) DS FA battalion status boards and charts which track tube and ammunition status.

(8) DS FA battalion operations journal/log.

3) The DS FA battalion FDO and FDC section evaluate information and update FDC products. [ARTEP 6-115-MTP, Task 06-3-02-2130, 3000, 2320, 2340, 2350]

a) The DS FA battalion FDO and FDC section evaluate information. [ARTEP 6-115-MTP, Task 06-3-02-2320]

(1) Need to update initialization data based on changes to firing parameters.

(2) Refinements/changes from brigade and Bn TF FSO/FSEs.

(a) Fire plans.

(b) Target lists.

(c) Schedule of fires.

(d) FSCM.

(e) Target value analysis HPTs.

(f) Location of friendly units.

(3) Information from other staff officers.

(a) Status of survey.

(b) Ammunition status.

(c) Availability of radar.

(4) Information and status of batteries.

(a) Units in ready to fire status.

(b) Ammunition status.

(c) Latest met message received.

(d) Determines need for registration.

b) The DS FA battalion FDO and FDC section update fire direction products.

(1) Changes to commander's criteria entered in IFSAS/ AFATDS.

(2) SITMAP, FSCM, and location of friendly units.

(3) All initialization data and confirm positive check of firing data.

(4) Firing parameters based on updated met messages.

(5) All fire plans, schedule of fires, groups of fires, FPFs, and other defensive fires with most recent firing data.

(6) Current target overlay. [FM 6-20-1, p. 3-5]

(7) Planned targets and targets of opportunity. [FM 6-20-1, p. 3-5]

(8) Observer locations and status.

(9) Requests and inputs including firing unit information, formatted response such as AFU; UPDATE; BAMOUP.

4) The brigade FSO and brigade FSE section evaluate information and update fire support products. [ARTEP 71-3-MTP Task 71-3-9001, 9002]

a) The brigade FSO and FSE sections evaluate information. [ARTEP 71-3 MTP, Task 71-3-9001/2,3]

(1) Changes to guidance/direction.

(2) Desired brigade endstates with what is possible based on current fire support situation and trends.

(3) Changes to the brigade fire support plan which ensure synchronization with Bn TF fire support plans.

(4) Changes to FA task organization and locations or GS and GSR FA units.

(5) Information which confirms or refutes IPB information relative to achieving the brigade commander's intent.

(6) Changes to engineer FASCAM requirements in the fire support plan.

(7) Changes to Army aviation and Air Force requirements which cause refinements to the fire support plan.

(8) FSCM imposed by division or other headquarters.

(9) Status of fire support systems due to battle loss to include:

(a) Howitzers.

(b) FIST/FIST-vehicle (FIST-V).

(c) COLT/FIST-V.

(d) Target acquisition systems.

(10) Changes which should lead to convening the targeting and/or A2C2 teams.

b) Update fire support products. [ARTEP 71-3-MTP, Task 71-3-9002]

(1) Updated fire support estimates (may or may not be in written form).

(2) FSEM.

(3) Target lists.

(4) HPT list.

(5) Fire support graphics.

(6) Priority targets.

(7) FSCM.

(8) Observation plan.

(9) Aviation plan (with brigade air liaison officer (ALO) and Army aviation LNO):

(a) ACAs.

(b) SEAD.

5) The DS FA battalion RSO evaluates information and updates DS FA battalion survey products. [ARTEP 6-115-MTP, Task 06-8-02-2700]

a) The DS FA battalion RSO evaluates information. [ARTEP 6-115-MTP, Task 06-8-02-2700]

(1) Changes to guidance/direction, information, and priorities.

(2) Desired DS FA battalion endstates with what is possible based on current survey situation, status of survey teams, and trends.

(3) Evaluates changes to FA task organization to determine impact on survey plan.

(4) Evaluates changes to brigade survey priorities.

(5) Coordinates survey requirements directly with battery commanders. [FM 6-20-1, p. 3-5]

b) The DS FA battalion RSO updates survey products.

(1) Updated survey estimate (may or may not be in written form).

(2) Survey plan.

(3) Performs general reconnaissance and observation as directed by the DS FA battalion S3 and S2. [FM 6-20-1, p. 3-5]

6) The DS FA battalion CMLO evaluates information and updates DS FA battalion NBC products. [ARTEP 3-4-MTP, Task 3-4-0003, 0004, 0007, 0017]

a) The DS FA battalion CMLO evaluates information. [ARTEP 3-4-MTP, Task 3-4-0004, 0007]

(1) Changes to guidance, direction, and information.

(2) Desired DS FA battalion endstates with what is possible based on current NBC situation and trends.

(3) Information which confirms or refutes IPB information regarding achieving the commander's intent.

(4) Answers to intelligence queries which alter initial assessment of enemy NBC capabilities.

(5) Adjustments to plans from subordinate units which affect DS FA battalion NBC plans.

(6) Changes to divisional defensive NBC capabilities.

b) The DS FA battalion NBC section updates NBC products. [ARTEP 3-4-MTP, Task 3-4-0003; 0017]

(1) Updated NBC estimate (may or may not be in written form).

(2) MOPP analysis.

(3) Enemy NBC capabilities.

(4) NBC equipment and supplies inventories.

(5) NBC overlays and graphics.

(6) Provides the DS FA battalion S2 with locations of contaminated areas for inclusion in MCOO.

7) The DS FA Bn SO and communications section evaluate information and update DS FA battalion communication products. [ARTEP 6-115-MTP, Task 06-5-02-4000, 06-1-01-4100]

a) The DS FA battalion communications section evaluates information.

(1) Changes to guidance, direction, and information.

(2) Desired DS FA battalion endstates with what is possible based on current communication situation and trends.

(3) Information which confirms or refutes IPB information regarding achieving the DS FA battalion commander's intent.

(4) Answers to intelligence queries which alter initial estimate of enemy electronic and communications capabilities.

(5) Adjustments to plans from DS FA battalion CPs and subordinate DS FA battalion units on DS FA battalion communications planning.

(6) Results of communications checks.

(7) Performs communications reconnaissance and survey to assist the DS FA battalion S3 in siting key elements of the DS FA battalion, to include retrans stations. [FM 6-20-1, p. 3-6]

b) The DS FA Bn SO and communications section update communications products.

(1) Updated signal estimates (may or may not be in written form).

(2) Communications network overlay, area coverage overlay, and dead space overlay.

(3) SOI.

8) All DS FA battalion CSS officers (DS FA battalion XO, DS FA battalion S1, DS FA battalion S4, DS FA battalion surgeon) evaluate information and update CSS products. [FM 63-20, Chap 3, 6; FM 6-20-1, Chap 7; ARTEP 6-115-MTP, Task 06-3-01-2170, 12-1-C404, 06-3-01-6430, 08-3-C002, 06-3-01-6300]

a) The DS FA battalion CSS officers evaluate information.

(1) Evaluate desired DS FA battalion endstate with current and projected personnel, maintenance, transportation, medical, and supply status.

(a) Adequacy of CSS for the brigade main effort.

(b) Adequacy of CSS for the brigade secondary effort.

(2) Information which confirms or refutes IPB information which may affect achieving the DS FA battalion commander's intent.

(3) Answers to intelligence queries requested by CSS officers which could affect the initial CSS plan.

(4) Adjustments to plans from subordinate and supporting units which affect DS FA battalion CSS plans.

b) The DS FA battalion CSS officers update CCS products.

(1) The DS FA battalion S1 section updates personnel information. [ARTEP 6-115-MTP, Task 12-1-C404]

(a) Updated personnel services estimate (may or may not be in written form).

(b) Personnel status of subordinate and supported units.

(c) Casualty feeder reports.

(d) Personnel priorities as directed by the DS FA battalion commander.

(2) The DS FA battalion S4 section updates logistical information. [ARTEP 6-115-MTP, Task 06-3-01-6430]

(a) Maintenance, supply, and transportation portions of updated logistics estimates (may or may not be in written form).

(b) Supply:

1 Usage and percent fill of combat basic loads.

2 Configuration and location of immediate and emergency resupply (e.g., CL III, V) loads and push packages.

3 Adequacy of CSS supply assets.

4 Supply priorities as directed by the DS FA battalion commander.

5 Establishment and fill of stockpiles and caches.

(c) Maintenance: [ARTEP 6-115-MTP, Task 06-3-01-6300]

1 Number and type of equipment systems on hand and operational.

2 Systems non-mission capable and repairable.

3 Projections for the repair and return of fighting vehicle and other essential equipment.

4 On-hand CL IX, authorized stockage list (ASL), and prescribed load list (PLL) stockage levels.

5 Maintenance priorities and guidelines as directed by the DS FA battalion commander.

(d) Transportation:

1 Schedules and priorities.

2 Status of supplies, equipment, and materials requiring transport.

3 Availability of ground transport assets.

4 Availability of air transport assets.

5 Status of logistics packages.

6 Transportation recovery and back-haul plans.

7 MSR and ASR traffic and route conditions.

(3) The DS FA battalion surgeon updates medical information. [ARTEP 6-115-MTP, Task 08-3-C0002]

(a) MEDEVAC capabilities.

(b) CL VIII stocks and resupply activities.

(c) Reinforcement and reconstitution of medical assets.

(d) Disposition and capability of DS FA battalion medical assets.

(e) Medical priorities as directed by the DS FA battalion commander.

9) The DS FA battalion HHB commander evaluates information.

a) Evaluates capability to move, secure, and support the DS FA battalion CPs.

b) Provides assessment of capabilities versus requirements to move, secure, and support the TOC to the DS FA battalion S3.

10) The DS FA battalion CPs maintain status. [FM 6-20-1, pp. 3-1 thru 3-6]

a) DS FA battalion TOC maintains status. [FM 6-20-1, pp. 3-1 thru 3-6]

(1) Information which supports the DS FA battalion CCIR.

(2) Current and projected combat power status of subordinate units (e.g., green-amber-red).

(3) Current O&I map.

(a) Operations overlay (DS FA battalion, brigade, and reinforcing units).

(b) Intelligence overlay.

(c) SIT TEMP overlay.

(d) Event template overlay.

(e) MCOO.

(f) Fire support overlay.

(4) Status of key communications links.

(5) CSS overlays and information per DS FA battalion TSOP.

(6) Intelligence information from brigade, DIVARTY, and higher headquarters.

(7) Dispositions of collection assets.

(8) Information on external units conducting R&S and security operations to prevent fratricide.

(9) Dispositions and status of patrols and other R&S and security forces.

(10) Status of tactical operations to ensure compliance with stated mission time-lines.

(11) Obstacle and survivability position construction and progress as compared to time-lines.

(12) DST.

(13) FSEM.

(14) Synchronization matrix.

(15) Journals/logs.

(16) Status of key communications links.

b) The DS FA battalion ALOC maintains status. [FM 6-20-1, Chap 7]

(1) Current O&I map.

(a) Operations overlay (DS FA battalion, brigade, and reinforcing units).

(b) Rear operations, security, and threat overlay.

(c) Intelligence overlay.

(d) SIT TEMP overlay.

(e) Event template overlay.

(f) MCOO.

(g) Fire support overlay.

(2) DST.

(3) CSS SITMAP and overlays.

(a) MSR and ASR.

(b) CSS locations, current and projected.

(c) Decontamination sites.

(4) Synchronization matrix.

(5) Location and status of petroleum, oil and lubricants awaiting distribution to the batteries.

(6) Location and status of ammunition awaiting distribution to the batteries.

(7) Location of DS maintenance contact team and recovery capability.

c) The DS FA BSOC maintains status.

(1) Current O&I map.

(a) Operations overlay (DS FA battalion, higher, and adjacent units).

(b) Rear operations, security, and threat overlay.

(c) Intelligence overlay.

(d) SIT TEMP overlay.

(e) Event template overlay.

(f) MCOO.

(g) Fire support overlay.

(2) DST.

(3) CSS SITMAP and overlays.

(a) MSR and ASR.

(b) CSS locations, current and projected.

(c) Decontamination sites.

(4) Synchronization matrix.

(5) BSA security plans.

(6) CSS staff journal.

(7) Current and projected personnel and equipment status.

(a) Personnel strength.

(b) Operational readiness rate for equipment.

(c) Status of supplies.

(d) Casualties.

(e) Replacement personnel status and location.

(f) Damaged and non-mission capable vehicles and equipment.

(8) Location and evacuation of EPW and their equipment.

(9) Location and evacuation of displaced persons.

(10) Status of key communications links.

c. DS FA battalion CPs and staff communicate information [FM 6-20-1, pp. 3-1 thru 3-3; FM 101-5, Chap 5]

1) All DS FA battalion CPs and staff disseminate information. [FM 6-20-1, pp. 3-1 thru 3-3]

a) Provide briefings to the DS FA battalion commander on the status of mission.

(1) Focus briefings on CCIR.

(2) Staff provides updates based on commander's requirements as FSCOORD and DS FA battalion commander.

b) Each staff representative communicates critical information needed to:

(1) Coordinate DS FA battalion actions and plans.

(2) Monitor the situation.

(3) Direct DS FA battalion actions.

c) All DS FA battalion staff officers remain alert for and ensure that critical information they receive is passed to other DS FA battalion staff officers who require the information as soon as it is received.

d) Continually assess and report risks and hazards to mission accomplishment and force protection.

2) The DS FA battalion S2 and intelligence section communicates enemy's situation, evaluations of enemy capabilities, and analyses of PIR, IR, and routine information to: [ARTEP 6-115-MTP, Task 06-3-01-2511]

a) Brigade and DIVARTY S2.

b) Subordinate/supporting unit S2s.

c) DS FA battalion TOC.

d) DS FA battalion ALOC.

e) DS FA BSOC.

f) Adjacent unit headquarters in support of their collection efforts.

3) The DS FA battalion S3 section communicates operational information. [ARTEP 6-115-MTP, Task 06-3-01-2120, 2150]

a) Updated products including:

(1) DS FA battalion WARNOs and FRAGOs.

(2) Coordinating instructions.

(3) Reports on the DS FA battalion situation.

(4) Evaluations of DS FA battalion execution.

(5) Answers to CCIR and IR.

b) To: [FM 101-5, App A]

(1) DS FA battalion XO.

(2) DS FA battalion staff.

(3) Subordinate and supporting units.

(4) DS FA battalion ALOC.

(5) Brigade main CP.

(6) Brigade tactical CP.

c) The DS FA battalion S3 section communicates with adjacent units to coordinate: [ARTEP 6-115-MTP, Task 06-3-01-2180]

(1) Checkpoints, coordination points, phase lines, and contact points.

(2) Direct and indirect fire plans, control measures, and restrictive fire lines (RFL).

4) The DS FA battalion FDO and FDC section communicate operational information:

a) Refinements to the fire plan.

b) Target lists.

c) Support geometry (IFSAS/AFATDS input).

d) Attack criteria.

e) Subscriber tables.

f) Instructions for degraded operations and continuity of operations.

g) Enter and disseminate met messages.

5) The brigade FSO and FSE section communicate brigade fire support situation and analyses of CCIR, IR, and routine information. [FM 101-5, App A; ARTEP 71-3, task 71-3-9002/2,3]

a) To: [FM 101-5, App A; ARTEP 71-3 MTP, Task 71-3-9002/2, 3]

(1) Brigade engineer.

(2) Brigade S2.

(3) Brigade S3.

(4) DIVARTY O&I section.

(5) Division FSE.

(6) DS FA battalion S3.

(7) Subordinate Bn TF FSOs.

(8) ALO and Army aviation LNO.

(9) FSB commander for rear operations.

(10) DS FA battalion staff officers who need the information.

b) The brigade FSO and FSE section coordinate with adjacent and higher FSEs and DS FA battalion headquarters to ensure that: [ARTEP 71-3 MTP, Task 71-3-9002/2]

(1) Planned brigade fire support will not interfere with other fire support systems, will not disrupt adjacent unit operations, and will not jeopardize troop safety.

(2) Fire support information and products (e.g., target lists, FSEM, immediate CAS requests) are exchanged and refined.

c) The brigade FSO and FSE section coordinate with the DS FA battalion S3 and Bn TF FSOs to verify: [ARTEP 71-3-MTP, Task 71-3-3001/2]

(1) Control measures delineating mutual boundaries.

(a) Directed by division.

(b) Internal boundaries (Bn TFs, scouts, security forces).

(2) Air space control measures.

(3) FSCM.

(4) Signals and conditions under which restrictive measures will be emplaced or lifted.

6) The DS FA battalion CMLO communicates the DS FA battalion NBC situation and analyses of CCIR, IR, and routine information. [FM 101-5, App A; ARTEP 3-4-MTP, Task 3-4-0007; 0009; 0016]

a) To:

(1) Brigade CMLO.

(2) DS FA battalion subordinate commanders and leaders.

(3) Supporting NBC units (e.g., decontamination, reconnaissance).

(4) DS FA battalion staff officers who need the information.

b) The DS FA battalion CMLO coordinates with the brigade CMLO and supporting decontamination units to confirm deliberate decontamination efforts. [ARTEP 3-4-MTP, Task 3-4-0005]

7) The DS FA battalion communications section reports DS FA battalion communications situation and other routine information to other DS FA battalion staff sections and external headquarters and staff officers. [FM 101-5, App A; ARTEP 71-3-MTP, Task 71-3-1102/4]

a) To:

(1) Brigade signal officer.

(2) DS FA battalion subordinate commanders and leaders.

(3) DS FA battalion staff officers who need the information.

b) The DS FA battalion communications section coordinates with adjacent units and brigade headquarters. [AN]

(1) Confirms allocation and locations of signal assets and capabilities.

(2) Acquires signal equipment to supplement DS FA battalion CPs and subordinate DS FA battalion units which require special communications equipment.

8) DS FA battalion CSS officers report administrative and logistical situation and routine information to the DS FA battalion staff and external sources:

a) DS FA battalion subordinate commanders and leaders.

b) Brigade S1, brigade S4, division maintenance management center, and brigade surgeon.

c) FSB and MSB staffs.

d) DS FA battalion staff officers who need the information.

9) The DS FA battalion CSS staff coordinates with the DS FA battalion staff and DS FA battalion units: [FM 101-5, App A]

a) To identify additional requests for support.

(1) Transportation assets (ground and air).

(2) Medical augmentation.

(3) Maintenance support for vehicles and weapons systems and for the recovery of damaged vehicles or the return of repaired vehicles.

b) To coordinate the transportation of supplies and cargo through DS FA battalion units.

c) To coordinate routine, emergency, and critical resupply operations (e.g., delivery times, types and quantities of supplies required.

d) For receiving and processing replacements.

e) To track the evacuation of personnel and casualties.

f) To process awards, decorations, promotions, and legal actions.

g) For security and protection of CSS units operating forward.

10) DS FA battalion S4 coordinates with the DS FA battalion S3 to deconflict terrain requirements and projected locations for:

a) ATPs.

b) ASPs.

c) Forward arming and refuel points.

11) The DS FA battalion CSS staff performs coordination with the FSB and supporting CSS headquarters: [FM 6-20-1, pp. 7-8-10]

a) To process requests for support of the DS FA battalion.

(1) Additional transportation assets.

(2) Medical augmentation and support.

(3) Support of resupply operations.

(4) Intermediate DS/DS/intermediate GS maintenance support for vehicles and weapon systems and for recovery of damaged vehicles or return of repaired vehicles.

b) The DS FA battalion S4 coordinates the transportation of DS FA battalion supplies and cargo through adjacent units based on the locations of the BSA and other brigade or division supply points.

c) The DS FA battalion S4 coordinates routine, emergency, and critical resupply of the DS FA battalion (e.g., delivery times, types and quantities of supplies required).

d) Coordinates with the DS FA battalion S3 and the BAO for the requisition and delivery of CL V (ammunition). [FM 6-20-1, p. 7-2]

e) The DS FA battalion S1 processes awards, decorations, promotions, and legal actions of DS FA battalion personnel.

f) The DS FA battalion S1 coordinates with the DS FA battalion S2 for interrogation of prisoners and with the DS FA battalion S4 for processing of captured equipment and transportation requirements. [FM 6-20-1, p. 7-1]

g) The DS FA battalion S1 receives and processes replacements.

h) The DS FA battalion S1 tracks evacuation of personnel and casualties.

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7, App D, ARTEP 6-115-20-MTP, Task 06-1-02-1000, 06-2-02-1000, 06-3-02-1100, 1300, 1500, 1600, 06-1-02-1700; FM 6-20-30, Chap 2, App J; FM 101-5, Chap 3, Appendices F, J]

a. The DS FA battalion commander updates his estimate based on his assessment of the current situation and new information: [FM 100-5, pp. 2-14, 15; FM 101-5, pp. 1-4 thru 1-11, 3-85, Chap 4 and App C; FM 71-3, p. 3-2; Battle Command, Leadership and Decision Making]

1) Identifies changes to the mission.

a) The brigade and division commander's intents.

b) The brigade concept of the operation.

c) The DS FA battalion mission in terms of:

d) Present concept of operation (maneuver and fires).

e) Comparison of the present plan to the current situation.

f) Based on reports from the DS FA battalion staff, LNOs, and subordinate and supporting commanders, analyzes execution of the fire support plan to include:

(1) The adequacy of support for the forces in contact.

(2) Support for the brigade commander's plan.

(3) Timing, location, and effects of fire support.

(4) Ability to sustain fire support.

2) Identifies changes to the enemy situation:

a) Validity of estimate.

(1) Changes in enemy strength.

(2) Changes in enemy capabilities.

(3) Changes in projected enemy COA.

(4) DS FA battalion commander's designated essential elements of friendly information (EEFI).

b) Collection plan responsiveness.

(1) Whether PIR and IR are being filled.

(2) Adequacy of DS FA battalion collection assets' positions, activities, and objectives.

(a) FISTs, FOs, and COLTs.

(b) Army aviation elements.

(c) UAVs and ground surveillance radars (GSRs).

(d) Adjacent and forward units.

(3) Need for and adequacy of external information sources.

(a) Forward air controller (FAC) and CAS aircraft.

(b) Brigade staff and assets.

(4) Validity of the initial IPB, threat analysis, and decide criteria to support the detect, deliver, and assess functions.

(a) Sensor collection plan adequate for HPTs.

(b) Trigger points remain valid.

(c) Cueing plan effectiveness.

(d) Targeting cell awareness of target location accuracy requirements.

3) Identifies changes to friendly ("Troops") situation:

a) Validity of designated friendly forces information requirements (FFIR).

b) Dispositions and locations of:

(1) Brigade units. [ARTEP 71-3-MTP, Task 71-3-3003/3]

(2) DS FA battalion and reinforcing FA battalion and other supporting FA and fire support assets. [ARTEP 6-115-20-MTP, Task 06-3-02-1100/3]

(3) Target acquisition and collection systems. [ARTEP 6-115-MTP, Task 06-1-02-2600, 06-2-02-2001]

c) Composition and task organization changes of subordinate DS FA battalion units. [ARTEP 6-115-MTP, Task 06-2-02-3000, 06-3-01-2150/2]

d) Strength of subordinate units. [ARTEP 6-115-MTP, Task 06-2-02-3000]

e) Peculiarities and weaknesses of subordinate unit preparation and the implementation of the fire support plan. [ARTEP 6-115-MTP, 06-2-02-3000]

f) Vulnerability of friendly units to enemy NBC attacks. [ARTEP 6-115-20-MTP, Task 06-3-02-1240]

g) Loss (e.g., to enemy action, maintenance) of howitzers.

h) Loss (e.g., to enemy action, maintenance) of target acquisition systems, observers, or equipment (e.g., FISTs, COLTs, radars, FOs). [FN]

i) Status and allocation of:

(1) CAS (U.S. Air Force, U.S. Navy, U.S. Marine Corps). [FN]

(2) Naval surface fires.

(3) Attack and observation helicopter support.

(4) Nonlethal attack systems.

j) Changes in munitions availability. [FN]

k) Fire support requirements which exceed the DS FA battalion's and reinforcing battalion's abilities to satisfy, identified requirements as the brigade executes the mission. [FM 6-20-40, Chap 2].

l) Changes to priority targets and the fire support plan resulting from changes to the status of target acquisition and firing units. [FM 6-20-40, pp. 2-22]

m) Changes to FSCM resulting from division guidance and input from subordinate units. [FM 6-20-40, Chap 2]

n) Impact of locations, activities, and intentions of adjacent units (left, right, front, rear, higher) on brigade fire support coordination.

o) Subordinate unit delivery of fires, which include:

(1) Battery commanders' understanding of and actions to achieve the brigade commander's intent and fire support guidance.

(2) Location and execution of target acquisition systems and observers (e.g., FOs, enlisted terminal attack controller, supporting arms liaison team, COLTs).

(3) Batteries' execution of their missions.

(a) Troop leading procedures.

(b) Occupation of firing positions and delivery of fire by batteries.

4) Identifies changes to terrain.

a) Changes to initial terrain estimate and impact of differences on the concept of the operation.

(1) Terrain factors.

(a) Trafficability.

(b) Cant.

(c) Site to crest.

(d) Key terrain.

(e) Avenues of approach.

(2) Requirement for units to occupy alternate positions or to prepare new positions to continue support of operation.

b) Weather and forecasted weather factors' validity.

(1) Visibility (including fog and cloud cover) and light data.

(2) Effects of weather.

(a) Impact on trafficability.

(b) Impact of meteorological data on delivery of fires.

5) Identifies changes to time available:

a) Accomplishment of key mission in accordance with brigade time-lines.

b) Based on what has and has not been accomplished, sufficiency of time available to complete all tasks.

6) The DS FA battalion commander assesses the tactical situation and verifies: [FM 101-5, App C; FM 6-20, pp. 3-3 thru 3-6]

a) Fire support.

(1) Ability to support brigade forces in contact.

(a) HPTs are still valid.

(b) Brigade collection assets are capable of tracking HPTs to decision points.

(c) Radar cueing schedule and zones are providing the necessary targets to win the counterfire battle.

(d) Sufficient fire support is available to the Bn TF commanders to provide freedom of maneuver.

(2) Ability to support the plan.

(a) Ensures that fire plans have been adjusted by the brigade/Bn TF FSOs based on new enemy and terrain information.

(b) Fire plans have been refined and modified by the brigade FSO to ensure that fires are massed as designated by the brigade commander.

(c) Direct and indirect fire plans are synchronized and integrated with all other combat multipliers, including physical tie-in between Bn TF units and units to flanks.

(d) Fire support priorities adequately weight the brigade main effort.

(e) Target acquisition assets are providing timely data.

(f) Fire support units are positioned and prepared to continue support for the operation, or that they can move in time.

(3) Synchronization of fire support.

(a) Direct and indirect fire coordination measures have been disseminated, confirmed by, and implemented by DS FA battalion subordinate commanders.

(b) Target lists continue to be refined by the brigade FSO and Bn TF FSOs and are synchronized with changes to the brigade or Bn TF schemes of maneuver.

b) Mobility and survivability.

(1) Obstacles are in place or are projected to be.

(2) Obstacles are observed and covered by fires and observation.

(3) Modifications based on new information to FASCAM employment plans have been made by the brigade engineer, ABE, and brigade FSO.

c) CSS.

(1) CSS priorities are adjusted based on new information.

(2) Supplies are adequate to support the operation and are being delivered to DS FA battalion units on time.

(3) There are sufficient transportation assets available and operational to support the operation.

(4) The status of personnel fill enable DS FA battalion units to accomplish their missions and tasks.

(5) The state of morale in the DS FA battalion continues to be high.

(6) The current and projected state of maintenance of equipment in the DS FA battalion meets mission requirements.

(7) Medical personnel, supplies, and equipment are available and positioned to support the operation.

(8) Tube strength remains adequate to provide fire support for the current operation and on-order missions.

(9) The ALOC is positioned to provide timely logistic support to the batteries.

(10) Ammunition levels in the batteries are adequate to support the fire plan, targets of opportunity, and high volume fires such as FASCAM.

d) Command and control.

(1) Key digital and communications links within the DS FA battalion remain operational.

(2) Current and projected locations of DS FA battalion CPs provide for continuous command and control.

b. The DS FA battalion commander projects the outcome of the current battle based on his evaluation of the current plan and the status of the fire support system. [FM 101-5, pp. 1-11 thru 1-17, 4-48]

1) Activities of the DS FA battalion are assessed to ensure that the DS FA battalion is executing the brigade fire support plan. [FM 6-20-40, pp. 2-18; FM 6-20-50, p. 2-18]

2) FA target acquisition radars and systems operations are assessed to ensure that they are adhering to priorities for observation. [ARTEP 6-115-MTP, 06-2-01-2513/1]

a) Radars and systems are positioned as directed. [ARTEP 6-115-MTP, 06-2-01-2513/1]

b) Searches are being executed in directed sectors. [ARTEP 6-115-MTP, 06-2-01-2513/1]

c) Coverage of the brigade AO is being achieved as directed. [ARTEP 6-115-MTP, 06-2-01-2513/1]

d) Brigade radar zones are integrated with division radar zones to ensure no gaps in coverage exist. [ARTEP 6-115-MTP, 06-2-01-2513/1]

3) The DS FA battalion commander projects the outcome of the current battle to determine the collection plans capability to acquire and track brigade HPTs and other targets based on the situation. [FM 6-20-10, pp. 1-10, 2-11]

4) The DS FA battalion commander projects the outcome of the current battle to determine the need for additional fire support or target acquisition systems to achieve the required endstate for the current mission. [AN]

5) The DS FA battalion commander identifies additional fire support attack systems (e.g., FA, CAS, naval surface fires, nonlethal) required to execute the brigade fire support plan. [FM 6-20-40, pp. 2-5; FM 6-20-50, pp. 2-5]

6) The DS FA battalion commander identifies additional target acquisition and collection systems required to execute the fire support plan. [FM 6-20-40, pp. 2-5; FM 6-20-50, p. 2-5]

7) The DS FA battalion commander identifies alternatives and options for changing the current distribution and missions of existing brigade target acquisition and attack systems assets to allow the brigade fire support plan to be executed. [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5]

c. The DS FA battalion commander anticipates future requirements and actions (sequels) based on his projection of the outcome of the current battle. [FM 101-5, pp. 1-15, 4-46, App C]

1) The DS FA battalion staff assists the DS FA battalion commander in his assessment of future requirements by providing information. [AN]

2) Mission.

a) The brigade and division commanders' intents are continuously reviewed for probable mission changes.

b) Friendly capabilities and templated/anticipated enemy capabilities are compared to determine if directed and projected endstates can be achieved as planned.

c) Branches, sequels, and alternative COAs for the current mission are reviewed to determine the need for modification based on available information.

d) Risk criteria are reassessed.

e) On-order missions are reviewed.

f) Necessary changes to the planned role and employment of fire support assets are determined.

g) Impact of changes to the brigade fire support plan on the FASP.

3) Enemy.

a) Satisfied PIR, IR, and other intelligence information are reviewed for deviations from the original templated enemy action.

b) Enemy's mission and intent are not as anticipated.

c) Confirmed enemy strength and dispositions are not the same as initially templated.

d) Updated SIT TEMP and event templates are assessed to determine the DS FA battalion's ability to achieve future contingencies.

d) The DS FA battalion commander may adjust PIR and IR.

e) The DS FA battalion commander decides whether there is a need to recommend changes to the designation of NAIs, TAIs, and HPTs.

4) Troops.

a) Future mission capability of subordinate units is projected.

(1) Combat power, current and projected, required to achieve new or previously unidentified tasks.

(2) Projected equipment and personnel status.

(3) Ability to move and maneuver based on changes to terrain factors.

(4) Capability to range critical targets and mass fires as required to meet new conditions or missions.

b) Impact of other units' plans on DS FA battalion plans.

c) Adequacy of future logistics support areas and MSR/ASRs is determined.

d) Adequacy of supplies to meet new requirements is determined.

e) The DS FA battalion commander reviews and updates FFIR as needed.

5) Terrain.

a) Impact of terrain factors in and around the proposed firing positions.

b) Impact of projected weather on terrain factors.

c) Impact of terrain on choice of munitions.

6) Time.

a) Projections of time available versus time required to meet new mission requirements.

b) Changes to mission time-lines necessitated by enemy activities or changes to DS FA battalion or elements' missions.

d. The DS FA battalion commander decides whether the plan needs to be changed. [FM 101-5, pp. 4-48]

1) The DS FA battalion commander decides the current plan meets the assessed situation and continues to monitor and direct DS FA battalion fires. [FM 101-5, p. 4-48]

2) The DS FA battalion commander decides the plan must be modified. [FM 101-5, p. 4-48]

   a) The situation is such that the current fire support plan and FASP no longer support forces in contact or support the maneuver plan.

   b) Changes to the brigade plan require that the fire support plan and FASP be modified.

3) The DS FA battalion commander decides to initiate a FRAGO; considers (see task 4 for description of how to develop and issue this FRAGO): [FM 101-5, pp. 1-14 thru 1-16]

   a) Whether COAs previously developed can be modified and developed as the new plan.

   b) Time available to develop, coordinate, and implement a new plan.

   c) Subordinate units' time to complete new preparation requirements under the new plan and task organization.

   d) The DS FA battalion staff's ability to continue to monitor and direct current DS FA battalion activities while meeting new planning requirements.

4) The DS FA battalion commander assesses the impact of new FRAGOs from brigade.

   a) Time required to plan and prepare for new mission based on current mission time-lines.

   b) Ability of the DS FA battalion to respond to the new situation based on the level of mission preparedness.

      (1) Fire units available to respond without impacting the DS FA battalion's ability to perform the current mission.

      (2) Availability of CSS and supplies to support the new situation without impacting on support necessary for the current mission.

   c) Capability of the DS FA battalion staff to dedicate time and effort to plan and coordinate new missions; impact of diverting key staff members from monitoring execution of the current mission to planning for a new mission.

5) The DS FA battalion commander determines how to modify the military decision-making process (MDMP) based on complexity, potential for confusion on the battlefield, and time available. [FM 101-5, Chap 4]

a) The DS FA battalion commander determines staff availability, the magnitude of change to the plan, and the amount of time available before execution.

b) The DS FA battalion commander decides where to conduct the decision-making process and actions required to produce and disseminate the FRAGO.

4. **The direct support field artillery battalion commander directs changes to the operation or plan**. [TRADOC Pam 11-9, Section IV; ARTEP 6-115-20-MTP, Task 06-2-02-1000, 06-3-02-1100, 1130-1190, 1300, 1390, Battle Command, p. 12; FM 6-20-40, Chap 1, 2; FM 101-5, Chap 2, 4]

a. The DS FA battalion commander and/or staff issue WARNOs to alert DS FA battalion staff members and subordinate DS FA battalion elements that the plan will be changed. WARNOs may include: [FM 101-5, p. 4-55]

1) The enemy situation, events, and the mission, task, or operation.

2) The brigade and division missions.

3) The brigade and division commanders' intents.

4) The DS FA battalion commander's intent statement.

5) The earliest time of movement or degree of notice the DS FA battalion commander gives to the main body.

6) Orders for advanced parties, reconnaissance parties, and azimuth of fire.

7) Service support instructions, special equipment necessary, regrouping of transportation, or preliminary moves to assembly areas.

8) The rendezvous point or time for assembly of an orders group; whether commanders or representatives are to attend; time needed for issuing written orders.

b. The DS FA battalion commander conducts the MDMP in a time-constrained environment, if required. [FM 101-5, pp. 4-41 thru 4-60]

1) When planning changes to current orders or planning for a new mission during the execution phase of the current battle, the DS FA battalion commander must:

a) Consider using products developed during the MDMP for the current mission as reference points from which modifications are made to predetermined branches and sequels. Products include:

(1) Weather analysis.

(2) Terrain analysis.

(3) Enemy OB and updated IPB products.

(4) Current updated staff estimates.

(a) DS FA battalion capabilities.

(b) Constraints.

(5) PIR, EEFI, and FFIR requested by the DS FA battalion commander.

b) The DS FA battalion commander and staff simultaneously monitor, plan, and direct all aspects of DS FA battalion operations (e.g., support of the counter-reconnaissance battle, support of the current mission, changes to the current plan, and the next mission being formulated).

c) The DS FA battalion commander and staff monitor the pace of the battle so as to make changes in a timely manner, and if appropriate, plan for a future mission.

d) Recognize the similarities and/or differences between the initial plan and new requirements.

e) Assess the friendly force posture, enemy probable actions, and battlespace.

f) The DS FA battalion commander and staff anticipate the outcome of the current fight to begin considering future requirements and actions.

2) The DS FA battalion commander reviews his estimate.

a) Mission: identifies specified and implied tasks which his DS FA battalion must accomplish.

b) Enemy: the DS FA battalion commander identifies:

(1) A single or limited number of enemy COA which the DS FA battalion must defeat.

(2) Enemy strength, location, disposition, activity, equipment, and capabilities.

c) Terrain and weather: the DS FA battalion commander identifies relevant or specific aspects of soil type, hydrology, climatic conditions, and visibility.

d) Troops: the DS FA battalion commander analyzes the DS FA battalion's combat power in terms of capability relative to what he believes necessary to accomplish the mission.

(1) Capabilities, strengths, and weaknesses of subordinate commanders and units.

(2) Weapon systems and equipment.

(3) Disposition.

(4) Supplies.

(5) Troop rest and morale.

e) Time: The DS FA battalion commander determines the time available for planning, preparing, and executing the operation for both enemy and friendly forces.

3) The DS FA battalion commander and S3 conduct a quick mission analysis; they consider: [FM 101-5, p. 4-48]

a) The current situation and information.

b) The brigade and division commanders' intents and desired endstates.

c) Whether the DS FA battalion has the assets and resources to execute the new mission.

d) The changes to the fire support plan that determine the need to change the FASP.

e) The DS FA battalion commander may request information from the staff to support his COA development.

(1) BOS specific information from selected staff members.

(2) Information available in products developed during the initial mission MDMP.

4) The DS FA battalion staff assists the DS FA battalion commander in developing COA, if situation permits. [FM 101-5, p. 4-51]

a) Uses products and analyses developed during the initial mission MDMP to define branches and sequels for consideration.

b) Provides recommendations to modify existing branches and sequels to meet new requirements.

c) Provides recommendations on developing new branches and sequels based on new requirements.

5) The DS FA battalion commander selects a COA and describes his revised concept to his staff. [FM 101-5, p. 4-49]

a) Typically, one enemy and one friendly COA are assessed due to the time constraints which limits and streamlines the decision-making process.

b) The DS FA battalion commander explicitly expresses COA concepts:

(1) Intent and desired endstate.

(2) Concept of operations.

(a) Major components of movement plan (centralized or decentralized control).

(b) Integration of combat multipliers.

(c) Critical HPTs and center of gravity.

(3) Enemy COA(s) to be considered.

(4) CCIR.

(5) Limitations.

(6) Risks.

c) The DS FA battalion commander provides the concept and guidance to the staff for detailed COA development and mission analysis.

d) If time is available, the DS FA battalion staff conducts mission analysis and:

(1) Develops details on the COA provided by the DS FA battalion commander.

(2) Develops branches and sequels to the selected COA which adhere to the DS FA battalion commander's guidance.

6) The DS FA battalion commander performs a suitability-feasibility-acceptability analysis of the new plan. The DS FA battalion commander performs the analysis by himself or with staff assistance. [FM 101-5, p. 4-51]

a) Suitability factors:

(1) New concept accomplishes the DS FA battalion mission.

(2) New concept meets the brigade and division commanders' intents.

(3) The plan accomplishes his intent for the DS FA battalion's endstate.

b) Feasibility factors:

(1) Sufficient time to execute the plan as designed.

(a) Duration of events.

(b) Time and distance factors for maneuver and fires.

(2) Sufficient ground and air space to accomplish the plan as designed.

(a) Roads and terrain support the plan.

(b) Depth of action

(3) The means to execute the plan as designed are available.

(a) DS FA battalion combat power vs. the enemy (force ratios).

(b) Required ammunition available to support the plan (e.g., smoke, FASCAM).

(4) Impact of on-going preparation activities.

(5) Impact on subordinate units and combat multipliers.

(6) Requirements to alter task organization.

c) Acceptability:

(1) Mission success is not at significant risk of failure.

(2) Hazards to soldiers, equipment, and supplies are within acceptable limits.

7) The DS FA battalion commander quickly compares COAs (if more than one).

8) The DS FA battalion commander selects a COA and announces his decision to key DS FA battalion staff members.

9) The DS FA battalion commander conducts mission risk assessment to ensure that conditions most likely to cause mission failure and accidents (including fratricide) have been mitigated.

a) DS FA battalion units have been tasked within their capabilities.

b) Procedural and positive risk-reduction control measures have been implemented, for example:

(1) Emphasizes situational awareness.

(2) Emphasizes positive target identification.

(3) TSOPs are consistent with doctrine and are adhered to.

(4) Doctrinally correct terminology is applied to all control measures (e.g., fire support coordination lines [FSCLs], and restrictive fire lines [RFLs]).

(5) ROE are clear.

10) The DS FA battalion commander reviews his current CCIR to determine: [FM 101-5, pp. 4-47/48]

a) Validity of CCIR.

b) New CCIR required to provide the DS FA battalion commander with the information needed to make decisions about the plan.

11) The DS FA battalion commander directs preparation of FRAGOs. [FM 101-5, App H;]

a) The DS FA battalion S3 manages and supervises internal and external coordination by the staff to synchronize plan refinements.

b) The staff takes prompt action to accomplish the guidance given by the DS FA battalion commander.

(1) Publishes refinements to orders and planning and execution products such as DST, synchronization matrix, FSEM.

(2) Initiates requests to DIVARTY for additional support.

c) The DS FA battalion staff at the DS FA battalion TOC refines plans, facilitates planning for future operations, identifies and corrects problems identified during subordinate unit execution, and coordinates additional support from DIVARTY.

d) The DS FA battalion staff develops FRAGOs reflecting changes to the initial plan for the DS FA battalion commander's approval: [FM 101-5, App H]

(1) Graphics and control measures for the operation.

(2) DST and synchronization matrix from the brigade FRAGO.

(3) Fire support plan, FSEM, FSCM.

(4) Communications plan.

(5) CSS plan.

12) The DS FA battalion commander approves FRAGOs and directs members of his staff to issue FRAGOs based on his approval or in compliance with his guidance. [FM 101-5, p. 4-49]

13) The DS FA battalion S3 issues complete FRAGOs which contain: [FM 101-5, App H]

a) Allocation of all FA assets.

b) Projected changes to the allocation of FA assets based on tactical contingencies in the brigade OPORD (on-order missions).

c) The DS FA battalion commander's concept of the operation.

d) Requirements for positioning and movement of firing units to support the fire support plan. (FASP may or may not be written).

e) The CSR for ammunition, if any.

f) Arrangements for command and control if they differ from unit DS FA battalion TSOPs.

g) Specific instructions for attached target acquisition assets, survey, and met.

h) Specific instructions for CSS, if different from normal unit SOPs.

i) Restrictions on ammunition expenditures, types of fires, and limiting risk to friendly troops.

j) Current and on-order FSCM.

k) The target list developed by the brigade.

l) Schedules for preplanned fires.

m) Special instructions on ROE, fire support communications, and logistic support.

n) Locations of DS FA battalion CPs, ASPs, and ATPs.

o) NBC coordinating instructions.

c. The DS FA battalion staff coordinates internally and with higher, adjacent, and supporting elements to coordinate the FRAGO. [FM 101-5, App B]

1) The DS FA battalion staff must inform DS FA battalion elements of outdated/preempted orders, execution products, and annexes containing information that has been superseded by the current FRAGO.

2) The DS FA battalion S3, at the TOC, must analyze the current FRAGO in light of current brigade, adjacent, and supporting unit OPORDs to preclude conflict.

3) The DS FA battalion S3 supervises the staff actions necessary to assist the brigade commander to synchronize the current battle.

4) The DS FA battalion staff understands the DS FA battalion commander's visualization of synchronization requirements and performs coordination necessary to integrate the FRAGO.

5) LNOs communicate the FRAGO and the DS FA battalion commander's intent to their respective headquarters.

5. **The direct support field artillery battalion command posts manage and maintain command, control, and communications.**

a. DS FA battalion CPs manage means of communicating information. [FM 101-5, Chap 6, App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

1) The DS FA battalion commander employs an "information manager" from the staff (usually the DS FA battalion S3): [FM 101-5; Chap 6, App B]

a) Facilitates the flow of information and communication of information from staff members and subordinate units.

b) Outlines and monitors the performance and responsibilities of the staff in processing mission information, status of FA units, and the DS FA battalion commander's information requirements.

c) The DS FA battalion S3 at the TOC manages communication: [ARTEP 6-115-MTP, Task 06-06-3-01-2120, FM 6-20-1, pp. 6-7 thru 6-21]

(1) Facilitates control and coordination for the DS FA battalion commander through communication with subordinate, adjacent, and supporting elements.

(2) Passes processed information and keeps the DS FA battalion commander updated on new information through concise, consolidated updates.

(3) Operates and monitors communications nets.

(a) DS FA battalion command (voice).

(b) Brigade command (voice).

(c) Fire support nets (voice and digital).

(d) Fire direction nets (voice and digital).

(e) DS FA battalion operations/fire (voice).

(f) DS FA battalion administration and logistics (A/L) (voice).

(g) DIVARTY command (voice).

(h) DIVARTY operations/fire (voice and digital).

d) The assistant S3 manages the operations of the TOC and the operations section when the S3 is not available. [FM 6-20-1, p. 3-2]

(1) Coordinates and integrates staff activities.

(2) Initiates staff action as directed by the DS FA battalion commander, XO, and S3.

2) LNOs provide information to the DS FA battalion commander and staff and to the headquarters they represent. [FM 101-5, App L]

a) Responses to specific questions asked of LNOs.

b) Unit locations, activities, capabilities, status, and intentions.

c) Coordination problems.

(1) Inability to reach/meet with specific people or staff positions.

(2) Receipt of information which invalidates or should change estimates and plans.

d) Issues.

3) All DS FA battalion CPs eavesdrop on lower and adjacent unit command and O&I nets for information. [FN]

4) All DS FA battalion CPs ensure that information on the situation is communicated between staff officers during shift changes. [FM 71-3, p. 3-25]

a) Enemy activities.

b) Status of subordinate units.

c) On-going staff actions which must be monitored, tracked, and completed.

d) Time-lines and suspense which must be met.

e) Planning for future missions.

5) All DS FA battalion CPs communicate routine information per the DS FA battalion TSOP. [FM 101-5, p. 6-5]

6) Trains CPs (ALOC/BSOC).

a) DS FA battalion XO is the second in command of the battalion. He is the senior staff officer of the unit and serves as the primary logistician. [FM 6-20-1, p. 3-4]

(1) Supervises the activities of the CSS staff.

(2) Primarily responsible for ensuring that the DS FA battalion is sustained.

(3) Makes face-to-face contact with his counterparts on the brigade, DIVARTY, and FSB staff and ensures that the DS FA battalion is supported with a minimum of confusion or lost effort.

b) The ALOC positions during mission execution to conduct rapid movement of emergency CL III and V forward to support the DS FA battalion. [FM 6-20-1, p. 7-8]

(1) Monitors the DS FA battalion A/L net to determine subordinate unit CSS requirements.

(2) Rapidly assumes the functions of the TOC if required.

c) The DS FA battalion S4, assisted by the PSNCO, supervises ALOC operations. [FM 6-20-1, p. 7-5; FM 6-20-40, p. F- 4]

(1) Manages the DS FA battalion A/L net; maintains communications with subordinate and supporting units and headquarters.

(2) Monitors the tactical situation and maintains communications to ensure that ALOC is prepared to assume duties of the DS FA battalion TOC if needed.

(3) Operates on and monitors communications nets.

(a) DS FA battalion command.

(b) DS FA battalion A/L.

(c) Brigade A/L.

d) The field trains BSOC locates with the BSA and coordinates all requirements for battalion organic and attached elements with all units in the BSA and with parent units as required.

e) The BSOC is supervised by the DS FA battalion S1.

b. The DS FA battalion CPs maintain command, control, and communications (C3) throughout the battle. [FM 6-20-40, p. 26; FM 6-20-50, App C; FM 101-5, Chap 5 and 6, App A, B, L]

1) Positioning is such that the DS FA battalion commander maintains communications with brigade, DIVARTY, reinforcing battalion, and subordinate units to provide continuous fire support to the force during the battle and the consolidation and reorganization phase. [FM 6-20-1, p. 3-25]

a) The DS FA battalion commander exercises command and control during mission execution.

b) DS FA battalion, battery, and platoon CPs displace, as required, during mission execution to provide the most responsive fire support during the battle.

2) The DS FA battalion CPs take action to survive: [FM 6-20-1, p. 3-25]

a) DS FA battalion staff ensures that CPs are not detected by the enemy by using passive defense measures.

b) The DS FA battalion CPs use cover, concealment, and routes which reduce detection by the enemy.

c) Local security is structured to provide early warning, perimeter protection, and a reaction force for immediate response.

d) OPSEC is continually monitored.

3) Communications are maintained without interruption with all subordinate elements and brigade to allow the DS FA battalion commander and staff to exercise command and control. [FM 6-20-1, p. 3-26]

c. The DS FA battalion re-establishes C3 operations in the event of the loss or destruction of the TOC. [FM 101-5, Chap 5, App B, Battle Command Techniques and Procedures, Chap 4]

1) In the event of a catastrophic loss of communications, C3 for the DS FA battalion is assumed per the DS FA battalion TSOP or plan. Continuity of operations for the DS FA battalion is a function of the automated fire control present in the battalion.

a) Tactical fire direction system (TACFIRE).

(1) Control assumed by reinforcing battalion TOC in mutual support unit role. (First priority).

(2) Control assumed by a pre-designated battery. (Second priority for degraded operations).

b) IFSAS/light TACFIRE.

(1) In the event of a loss of the dual station FDC, mutual support can be assumed by any pre-designated single station briefcase terminal/lap-top computer unit. Priorities for continuity of operations:

(a) DS FA battalion O&I.

(b) The brigade FSE.

(c) Reinforcing battalion.

(d) Autonomous operations.

(2) Activation of mutual support requires proper system initialization and command authorization.

c) AFATDS.

(1) AFATDS software and distributed architecture provide internodal (within an operational facility [OPFAC]) and intranodal (external OPFAC) continuity of operations.

(2) Continuity of operations is a battle drill necessary for any operation.

(3) Listed below are the primary backup units for the divisional AFATDS nodes. Secondary back up units may be established based on the DS FA battalion TSOP.

Principal	**Primary Back Up**	**Secondary Back Up**
Division Main FSE	Division TAC FSE	Division Artillery O&I
Division TAC FSE	Division Main FSE	Division Artillery O&I
Division Artillery	Reinforcing Bde	
Bde FSE	Bde TAC	DS Bn FDC
DS Bn FDC	DS Bn O&I	Reinf Bn FDC or Bde FSE
DS Artillery Bn CP	Reinf FA battalion	Bde FSE

d. Succession of command is implemented as per the DS FA battalion TSOP.

1) The DS FA battalion XO, as second in command of the DS FA battalion:

a) As soon as it is confirmed that the DS FA battalion commander is killed, captured, or evacuated from the brigade AO, the DS FA battalion XO assumes command of the battalion.

b) Notifies the DIVARTY commander and brigade commander.

c) Informs subordinate units that he has assumed command until further notice.

(1) If operating as the senior logistician at the ALOC/BSOC, determines the status of operations at the TOC or acting TOC.

(2) Moves forward to reestablish a CP if necessary.

(3) Moves to the brigade CP to ensure that fire support operations continue uninterrupted as planned.

d) Links-up with the brigade commander.

2) The DS FA battalion S3:

a) Continues to command and control the DS FA battalion elements from the TOC until the battalion XO has been informed of the tactical situation and is in position to assume command.

b) Informs the batteries and reinforcing battalion of succession of command.

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.** [FM 6-20-1, Chap 7; FM 6-20, pp. 3-5 thru 3-6]

a. The DS FA battalion commander initiates the decision-making process for the next mission in order to rapidly transition from the current operation to the next and directs planning to protect the force during the brigade consolidation and reorganization. He directs the batteries to ensure that:

1) Fire support systems are mobile and correctly emplaced.

2) Components of the fire support system are protected from enemy action ranging from terrorist attack and by-passed enemy forces to indirect fires supporting a counter-attacking force.

b. The brigade commander directs development of a fire support plan that covers the entire unit sector and fills any gaps among adjacent units. (Quick fire planning technique may be required; see Brigade BF 15.) Fires must be planned to:

1) Protect reorganizing troops.

2) Break up counter-attacks.

3) Prevent enemy reinforcement, disengagement, or resupply.

c. The DS FA battalion commander directs the DS FA battalion S3/XO to plan for the hasty reorganization of fire support units. (Deliberate reorganization or reconstitution is not a DS FA battalion commander's prerogative.)

NOTE: Deliberate reorganization or reconstitution is not a DS FA battalion commander's prerogative. Deliberate reorganization is a permanent restructuring of the unit and must be approved by the parent unit commander one echelon higher than the unit reorganized. Regeneration requires that the unit be pulled out of combat and is not a prerogative of the battalion commander. The CSS plan should, from its inception, have planned for an immediate resupply of CL I/III/V at the conclusion of a major fight. These supplies should be on stand-by in the combat trains, and the tentative location and distribution scheme (by TSOP) should already be rehearsed as part of the operation.

1) Provide unit personnel:

a) Personnel support functions (cross leveling units, MWR functions).

b) Adequate medical support.

c) Evacuate casualties.

2) Ensure that vehicles and individual and crew-served weapons are serviced and maintained. Repair deadlined or combat damaged equipment using repair parts available.

3) Resupply ammunition from existing stocks and redistribute ammunition among units.

4) Distribute fuel from existing stocks to both ground and aviation systems.

5) Evacuate irreparable equipment to designated collection or repair points.

d. The DS FA battalion commander directs the staff to assist in providing support for the brigade during the brigade consolidation. Normal staff operations continue with emphasis on the following: [FM 101-5, Chap 4; Battle Command Techniques and Procedures, Chap 2, 3; FM 71-3, App H]

1) The DS FA battalion XO:

a) Monitors refit and resupply operations of the batteries.

b) Directs and supervises the refurbishment of DS FA battalion units in preparation of the next mission.

c) Keeps the DS FA battalion commander informed of the activities of adjacent units.

2) The DS FA battalion S2:

a) Continues to update the intelligence estimate.

b) Assists in the preparation of DS FA battalion OPORD and/or FRAGOs.

c) Keeps the DS FA battalion commander informed of any change in the enemy situation.

3) The DS FA battalion S3:

a) Continues to monitor the current situation.

b) Continues to monitor all activities in the brigade deep battle area and supervises the activities in the brigade rear battle area.

c) Supervises the staff preparation of orders for follow on missions. Prepares the DS FA battalion order or FRAGO for the next mission based upon the DS FA battalion commander's guidance.

d) Maintains communications with brigade leadership and staff.

e) Focuses upon synchronizing the fires in support of the brigade reorganization and consolidation.

f) Ensures that the DS FA battalion XO is aware of the DS FA battalion commander's guidance, intent, and desired endstate for upcoming engagements.

g) Together with the DS FA battalion S2 and brigade FSO, revises the fire support plan to support continuing operations.

h) Monitors status of DS FA battalion units.

4) The DS FA battalion S4, together with the DS FA battalion XO and FSB commander, regenerates the DS FA battalion's combat power by providing support well forward and addressing:

a) The number and type of support units and resources available.

b) The DS FA battalion commander's priorities.

c) Relevant consumption factors.

d) The provision of necessary transportation to batteries to accomplish DS FA battalion directed tasks during continuation of the mission.

e) Critical weapons systems.

f) The threat to CSS units in general and those moving into the forward battle areas in particular.

g) Contingency plans if selected lines of communication (LOCs) are impassable, if the enemy situation in the brigade AO changes, or stocks on hand do not meet requirements.

5) The DS FA battalion S1 addresses:

a) Allocation of replacement personnel presently in the BSA to batteries based upon the DS FA battalion commander's direction or recommendation of the DS FA battalion S3 or XO.

b) Replacement of key leaders lost during previous operations.

c) Fill of leadership positions down to platoon level.

d) Refugee control issues.

e) Information on noncombatant activity in the brigade AO and other local population situations.

6) The DS FA battalion CSS staff keeps the FA Battalion XO and commander, as well as, when appropriate, the FSB commander or support operations officer of changes to the CSS situation.

e. The DS FA battalion commander directs the staff to provide technical support to the batteries.

1) The DS FA battalion commander ensures that alternate command and control facilities are available.

2) The DS FA battalion commander ensures that the technical aspects of fire support (meteorology, survey and digital, automated fire control, and communications) are accurate and rapid.

f. The DS FA battalion commander confirms that the DS FA battalion is prepared to continue the mission. Confirmation criteria include: [AN]

1) All DS FA battalion elements report successful resupply, refit, and regeneration of combat power.

2) The DS FA battalion S3 reports all DS FA battalion C3 facilities, CPs, and systems are fully operational.

3) The DS FA battalion S2 reports that all intelligence systems are fully operational.

4) The DS FA battalion S3 reports that all fire support systems are fully operational and that FA assets are mission capable.

a) Firing units/batteries.

b) BnTF/company FSOs.

c) FIST/FIST-Vs.

d) COLT/FIST-Vs.

e) Target acquisition systems.

f) Air and naval gunfire liaison company firepower control teams.

5) The DS FA battalion S1 reports that the DS FA battalion strength is adequate to continue successful mission accomplishment.

6) The DS FA battalion S4 reports that the maintenance and supply systems and status will support future operations.

TASKS ORGANIZED BY OUTCOMES

This component links the tasks with the outcomes the task performance supports. Each outcome is linked with all appropriate tasks. This component is used for two purposes. The first is to ensure that each BF outcome is sufficiently supported by all tasks necessary to achieve the outcome. The second is to verify that the outcomes selected support the BF purpose and that they are complete in that no additional outcomes are required to define the BF. This component can be used by trainers to facilitate assessment of training proficiency and to plan training.

Outcome 1

Direct support (DS) field artillery (FA) Bn command posts (CPs) maintain continuous communications with higher, adjacent, and subordinate headquarters.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

    a. The DS FA battalion commander directs subordinate forces.

        2) The DS FA battalion commander positions himself on the battlefield where he can best fulfill both his responsibilities as the FSCOORD to the brigade commander and as the DS FA battalion commander.

            a) As the brigade FSCOORD, positions himself where he can best influence the battle and assist the brigade commander in synchronizing indirect fire support.

                (1) With the brigade commander.

                (2) In the FSE.

            b) As the DS FA battalion commander, when required, is in the DS FA battalion area to best exercise his commander duties.

5. **The direct support field artillery battalion command posts manage and maintain command, control, and communications.**

    a. DS FA battalion CPs manage means of communicating information. [FM 101-5, Chap 6, App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

        1) The DS FA battalion commander employs an "information manager" from the staff (usually the DS FA battalion S3): [FM 101-5; Chap 6, App B]

c) The DS FA battalion S3 at the TOC manages communication: [ARTEP 6-115-MTP, Task 06-06-3-01-2120, FM 6-20-1, pp. 6-7 thru 6-21]

(1) Facilitates control and coordination for the DS FA battalion commander through communication with subordinate, adjacent, and supporting elements.

(3) Operates and monitors communications nets.

(a) DS FA battalion command (voice).

(b) Brigade command (voice).

(c) Fire support nets (voice and digital).

(d) Fire direction nets (voice and digital).

(e) DS FA battalion operations/fire (voice).

(f) DS FA battalion administration and logistics (A/L) (voice).

(g) DIVARTY command (voice).

(h) DIVARTY operations/fire (voice and digital).

2) LNOs provide information to the DS FA battalion commander and staff and to the headquarters they represent. [FM 101-5, App L]

6) Trains CPs (ALOC/BSOC).

c) The DS FA battalion S4, assisted by the PSNCO, supervises ALOC operations. [FM 6-20-1, p. 7-5; FM 6-20-40, p. F- 4]

(1) Manages the DS FA battalion A/L net; maintains communications with subordinate and supporting units and headquarters.

(2) Monitors the tactical situation and maintains communications to ensure that ALOC is prepared to assume duties of the DS FA battalion TOC if needed.

(3) Operates on and monitors communications nets.

(a) DS FA battalion command.

(b) DS FA battalion A/L.

(c) Brigade A/L.

b. The DS FA battalion CPs maintain command, control, and communications (C3) throughout the battle. [FM 6-20-40, p. 26; FM 6-20-50, App C; FM 101-5, Chap 5 and 6, App A, B, L]

1) Positioning is such that the DS FA battalion commander maintains communications with brigade, DIVARTY, reinforcing battalion, and subordinate units to provide continuous fire support to the force during the battle and the consolidation and reorganization phase. [FM 6-20-1, p. 3-25]

a) The DS FA battalion commander exercises command and control during mission execution.

b) DS FA battalion, battery, and platoon CPs displace, as required, during mission execution to provide the most responsive fire support during the battle.

2) The DS FA battalion CPs take action to survive: [FM 6-20-1, p. 3-25]

a) DS FA battalion staff ensures that CPs are not detected by the enemy by using passive defense measures.

b) The DS FA battalion CPs use cover, concealment, and routes which reduce detection by the enemy.

c) Local security is structured to provide early warning, perimeter protection, and a reaction force for immediate response.

d) OPSEC is continually monitored.

3) Communications are maintained without interruption with all subordinate elements and brigade to allow the DS FA battalion commander and staff to exercise command and control. [FM 6-20-1, p. 3-26]

c. The DS FA battalion re-establishes C3 operations in the event of the loss or destruction of the TOC. [FM 101-5, Chap 5, App B, Battle Command Techniques and Procedures, Chap 4]

1) In the event of a catastrophic loss of communications, C3 for the DS FA battalion is assumed per the DS FA battalion TSOP or plan. Continuity of

operations for the DS FA battalion is a function of the automated fire control present in the battalion.

a) Tactical fire direction system (TACFIRE).

(1) Control assumed by reinforcing battalion TOC in mutual support unit role. (First priority).

(2) Control assumed by a pre-designated battery. (Second priority for degraded operations).

b) IFSAS/light TACFIRE.

(1) In the event of a loss of the dual station FDC, mutual support can be assumed by any pre-designated single station briefcase terminal/lap-top computer unit. Priorities for continuity of operations:

(a) DS FA battalion O&I.

(b) The brigade FSE.

(c) Reinforcing battalion.

(d) Autonomous operations.

(2) Activation of mutual support requires proper system initialization and command authorization.

c) AFATDS.

(1) AFATDS software and distributed architecture provide internodal (within an operational facility [OPFAC]) and intranodal (external OPFAC) continuity of operations.

(2) Continuity of operations is a battle drill necessary for any operation.

(3) Listed below are the primary backup units for the divisional AFATDS nodes. Secondary back up units may be established based on the DS FA battalion TSOP.

Principal	Primary Back Up	Secondary Back Up
Division Main FSE	Division TAC FSE	Division Artillery O&I
Division TAC FSE	Division Main FSE	Division Artillery O&I
Division Artillery	Reinforcing Bde	
Bde FSE	Bde TAC	DS Bn FDC
DS Bn FDC	DS Bn O&I	Reinf Bn FDC or Bde FSE
DS Artillery Bn CP	Reinf FA battalion	Bde FSE

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.** [FM 6-20-1, Chap 7; FM 6-20, pp. 3-5 thru 3-6]

   d. The DS FA battalion commander directs the staff to assist in providing support for the brigade during the brigade consolidation. The DS FA battalion coordinating and special staff accomplish the following: [FM 101-5, Chap 4; Battle Command Techniques and Procedures, Chap 2, 3; FM 71-3, App H]

      3) The DS FA battalion S3:

         d) Maintains communications with brigade leadership and staff.

Outcome 2

The DS FA Bn commander (Cdr), other decision-makers, and the DS FA Bn staff receive, evaluate, and process timely and accurate battlefield information during mission execution.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

   b. The DS FA battalion commander ensures that each battlefield operating system (BOS) is integrated and coordinated with other BOS during delivery of fires and execution of battle. [FM 101-5, pp. H-36 - H-42]

      1) The DS FA battalion commander integrates intelligence requirements with the other BOS.

         a) The DS FA battalion commander, brigade targeting officer, brigade FSO, and DS FA battalion S2 review information to ensure that

FASP and decision aids are revised on a continuous basis as the battlefield situation changes.

(1) Decision support template (DST).

(2) Enemy situation template (SIT TEMP).

b) The DS FA battalion S2 processes information and disseminates updated intelligence of enemy situation, terrain, and weather.

(1) Descriptions and locations of obstacles, fortifications, and known or potential contaminated areas and enemy NBC delivery systems.

(2) Threat locations (CPs, weapons systems), strengths, capabilities, probable boundaries, known vulnerabilities, and threat probable COAs and intentions.

c) The DS FA battalion commander manages the detection effort to acquire and engage HPTs.

(1) Verifies that means are available to detect and track HPTs.

(2) Ensures that responsibility for the attack of critical HPTs has been assigned and that the responsible agency is prepared to execute with the assigned trigger.

(3) Confirms a backup attack system for each critical HPT.

(4) Verifies that assessment assets linked to critical HPTs are available as needed.

(5) Informs assessment asset managers as HPT refinements or attack times and measures change.

(6) Verifies that target intelligence from assessment is incorporated into overall enemy situational development.

2) The DS FA battalion commander integrates and coordinates fire support with maneuver.

a) The FSEM is reviewed to ensure that adjustments and refinements in the maneuver plan are continuously addressed by refinements in the fire support plan if necessary.

b) The AGM is reviewed and updated as necessary to reflect any changes in the brigade commander's guidance for attack of critical targets by phase of maneuver or as a result of changes in the maneuver plan.

c) FSCMs are reviewed to ensure that the rapid engagement of targets is facilitated while simultaneously safeguarding friendly forces.

d) Supported brigade targeting process information requirements are met with current information.

3) The DS FA battalion commander integrates and coordinates fire support with the other BOS.

a) The FA support plan (FASP) is coordinated with the brigade fire support plan.

(1) Changes and refinements to the fire support plan as a result of changes in the tactical situation or as a result of changes to the brigade plan must be integrated through FSCMs with the maneuver plan.

(3) The DS FA battalion commander must ensure that procedures are in place that allow the staff to quickly assess and respond to new information.

(4) The DS FA battalion S3 and S2 in conjunction with the brigade fire support cell will assess new information for the following:

(a) Accuracy and reliability.

(b) Whether target information meets target selection standards.

(c) Whether the new information requires substantial changes to the existing fire support plan.

(d) The best method of attack (FA mortars, close air support [CAS], etc.)

(5) Staff members, based on their assessments, will:

(a) Change the schedule of fires or preplanned target list by substituting higher priority targets.

(b) Delete suspected targets.

(c) Designate on-call targets.

(d) Shift fires from planned targets.

b) The brigade fire support plan is reviewed for refinements, to include:

(1) Shifts in priorities of fires and timing for preplanned and targets of opportunity engagements in each phase of the operation.

(2) Repositioning of primary and back-up observers to allow observation on all priority targets and engagement areas as information on the enemy changes.

(3) Priority of fires and priority targets for each phase of the mission, including method for prioritizing calls for fire.

(4) Artillery target groups and series are refined and updated based on the tactical situation and staff assessment of information received.

(5) Employment concept for special munitions (i.e., FASCAM, smoke, dual purpose improved conventional munitions [DPICM], Copperhead) is synchronized with any changes to the maneuver plan.

(6) CAS and Army aviation employment are coordinated with field artillery fires by implementation of ACAs.

(7) CAS, Army aviation, and field artillery support are synchronized for the conduct of JAAT missions and to provide SEAD fires during the battle.

(8) Control measures and restrictions are modified to support changes in the tactical situation.

(9) Electronic warfare (EW) attack measures are integrated with lethal attack measures to increase the synergistic effects against the targets.

(10) Naval surface fires, as available, are integrated with all other lethal and nonlethal attack measures.

4) The DS FA Cdr integrates and coordinates mobility/countermobility/ survivability with the other BOS.

   a) Verifies that fires are planned to cover all obstacles and that responsibility for triggering those fires is coordinated between the maneuver forces and their fire support representatives.

   b) Coordinates requirements for delivery of FASCAM with battery movement plans, requirements to service other HPTs, and ammunition resupply requirements.

5) The DS FA battalion commander integrates and coordinates air defense with the other BOS.

   a) Verifies that the DS FA battalion S2 has conducted a three dimensional intelligence preparation of the battlefield (IPB).

   b) Verifies that the DS FA battalion S3 has integrated that IPB into the position area overlay and updates the position area overlay as the air threat changes or ADA positions change.

   c) Verifies that the DS FA battalion S3 has considered incidental coverage by ADA elements deployed in the brigade area in the development of the FASP.

6) The DS FA battalion commander integrates and coordinates CSS with the other BOS.

   a) Verifies that CSS assets are positioned and are providing planned supply, medical, and maintenance support to the DS FA battalion during the mission, without interfering with the DS FA battalion delivery of fires.

   b) Verifies that push packages of emergency resupplies are configured and ready.

   c) Reviews designated MSR and ASRs to ensure that CSS assets continue to provide timely response.

   d) Verifies that medical assets and operations are supporting the DS FA battalion.

   e) Ensures that vehicles and equipment are being recovered, repaired, and returned to the user or delivered to higher maintenance echelons.

f) Verifies maintenance assets are task organized and are providing support.

g) Verifies that unit maintenance collection points (UMCPs) are in position and are providing support necessary to sustain fires.

7) The DS FA battalion commander integrates and coordinates command and control with the other BOS.

a) The DS FA battalion commander monitors the DST, synchronization matrix, AGM, and FSEM to ensure that:

(1) Modifications to the brigade plan and fire support plan are integrated.

(2) Mission details to achieve the brigade commander's intent are adequately reflected.

(3) Fire support is massed:

(a) Against the enemy.

(b) At the decisive point and time as visualized by the brigade commander.

b) Command and control measures are reviewed by the DS FA battalion commander, staff, and subordinate leaders to ensure that changes in the tactical situation are incorporated into all DS FA battalion documents; at minimum:

(1) Maneuver graphics and control measures (e.g., phase lines, objectives, routes, check and coordination points).

(2) Signals and quick execution code words.

(3) DST.

(4) Synchronization matrix.

(5) FSEM and FSCM.

c) CPs and staff continue to support the mission.

(1) Receive, process, and disseminate information.

(2) Move and position to support the DS FA battalion commander during the battle.

(3) Coordinate and integrate combat multipliers.

(4) Exchange information with brigade HQ, DIVARTY HQ, and CP of reinforcing FA battalion.

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.** [TRADOC Pam 11-9, Section IV; Battle Command, pp. 43 and 65; ARTEP 6-115-20-MTP; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]

a. The DS FA battalion CPs acquire information to assist the DS FA battalion commander. [TRADOC Pam 11-9, Chap 7 and App D]

1) The DS FA battalion staff members, operating out of the DS FA battalion tactical operations center (TOC) directed by the DS FA battalion commander or the DS FA battalion SOP, obtain information during the execution of the battle that is:

a) Critical in assisting the DS FA battalion commander to integrate and coordinate execution of fire support for the brigade. [FM 101-5, pp. 6-33, 6-34]

b) Focused on satisfying the DS FA battalion CCIR, PIR, and IR. [FM 101-5, pp. 6-8, 6-11, 6-16, and C-4]

2) The DS FA battalion S3 manages the flow of information in the DS FA battalion TOC and establishes a system to keep the DS FA battalion commander informed. [FM 101-5, pp. 6-2, 6-11, 6-34; ARTEP 6-115 MTP, Task 06-3-01-2110]

3) All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]

a) Focus information collection according to CCIR, PIR, and IR, and immediately communicate any response to CCIR to the DS FA battalion commander, XO, and S3. [FM 101-5, pp. 6-8, 6-11, 6-16, C-4]

b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's execution of fire support for the brigade battle in order to: [FM 101-5, pp. 6-33, 6-34]

(1) Monitor and modify activities as necessary.

(2) Verify/modify coordination between the DS FA battalion and adjacent units.

c) Provide appropriate recommendations to the DS FA battalion commander relative to their functional areas. [FM 101-5, pp. 6-33, C-2]

d) Continually coordinate with each other personally and with external headquarters to exchange needed information. [FM 101-5, pp. 3-84, App A]

4) The DS FA battalion CSM obtains information during visits and inspections, and advises the DS FA battalion commander on: [AN]

a) Morale, discipline, and adherence to standards by DS FA battalion soldiers.

b) Capability of the DS FA battalion to sustain fire support.

c) Assessment of the CSS system.

d) Assessment of the welfare of DS FA battalion soldiers.

e) Other duties or information requested by the DS FA battalion commander.

5) The DS FA battalion S2 section obtains intelligence information related to integrating and coordinating fire support for the brigade: [FM 101-5, pp. C-7, C-8; FM 34-130, Chap 2]

a) Information from brigade S2's intelligence products and DS FA battalion staff: [FM 6-20-1, pp. 3-10, 3-12]

(1) Changes from the DS FA battalion commander to guidance and mission concept, and his requirements for intelligence information determined during delivery of fires, and the assessment of battle damage and target attack criteria.

(2) Intelligence summaries (INTSUMs) and spot reports from brigade, DIVARTY, and division staff.

(3) Information from brigade, DIVARTY, and adjacent units based on previously submitted information queries.

(4) OPSEC reports from the DS FA battalion S3/operations section and subordinate units which contribute to the analysis of DS FA battalion security posture.

(5) Updates from the brigade S2 on enemy activity based on reports from the divisional military intelligence battalion.

(6) Information on the current situation learned by eavesdropping on brigade, DIVARTY, and adjacent unit command, operations, and intelligence (O&I) nets.

(7) Information from the battalion commander in his role as FSCOORD.

(8) Information from the brigade FSO, Bn TF/company FSO, and respective FSEs.

b) From subordinate units: [ARTEP 6-115-MTP, Task 06-3-01-2512]

(1) Information from FIST/FSO/combat observation/lasing team (COLT) teams.

(2) Information from survey parties.

(3) Information from battery defense observation posts /listening posts.

(4) Information from battery advance parties and position area reconnaissance.

(5) Information from radars attached to or organic to or otherwise supporting the DS FA battalion.

c) From DS FA battalion special staff officers. [FM 101-5, App A]

d) From LNOs from/to higher, adjacent, and supporting units. [FM 101-5, App L]

e) Information from other sources such as:

(1) Aerial photographs.

(2) Prisoners, deserters, and civilian population.

(3) EW, radars, and sensors.

(4) Unmanned aerial vehicles (UAV).

(5) Tracking of HPTs by brigade collection assets.

(6) Battle damage assessment (BDA) and post strike analysis of targets attacked.

6) DS FA battalion S3 section obtains operations information related to integrating and coordinating fire support for the brigade (e.g., changes to mission, enemy, troops, terrain and time (METT-T), and status of BOS). [FM 101-5, pp. C-8, C-9; ARTEP 6-115-MTP, Task 06-3-01-2120]

a) From the brigade commander and staff. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120]

(1) Direction from the brigade commander to the FSCOORD or brigade FSO pertaining to:

(a) Changes to mission concept or details of the plan.

(b) Requirements for information determined during battle.

(c) Other guidance and directives.

(2) FRAGOs/WARNOs from brigade.

(3) Situation updates from brigade and DIVARTY staff.

(a) SITREPs.

(b) Responses on queries and requests submitted by the DS FA battalion.

(c) Changes to the brigade situation which necessitate changes to the DS FA battalion OPSEC posture.

(d) Changes to the enemy situation (e.g., enemy reconnaissance activity, EW activity).

(e) Changes to requirements for support provided such as met, radar, and positioning of general support (GS) artillery.

(4) Division and corps units allocated terrain in the brigade AO.

b) From subordinate DS FA battalion units. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2150]

(1) Reports from subordinate DS FA battalion units.

(a) Reports of reconnaissance of position areas.

(b) Enemy contact.

(c) Current and projected strength and combat power.

(d) Battery XO reports.

(e) OPSEC reports.

(f) Results of local security operations.

(2) Requests for resources from subordinate DS FA battalion units based on their mission analyses and determination of their needs to accomplish their assigned tasks.

(3) Recommendations from battery commanders on changes to the FASP based on their current status and projected status.

c) From DS FA battalion staff officers and LNOs. [ARTEP 6-115-MTP, Task 06-3-01-2120; FM 101-5, App A]

(1) Information from the DS FA battalion S2 and intelligence section which confirms or refutes the operations estimate of the situation required to achieve the DS FA battalion commander's intent.

(2) Updates from the DS FA battalion S1 and S4.

(a) Personnel and unit status.

(b) Vehicle and equipment status.

(c) Status of all classes of supply.

(3) Updates from the DS FA Bn SO on the status of DS FA battalion communications links and systems.

(4) Updates from the DS FA battalion CMLO on the status and planned employment of chemical units.

d) Brigade FSE, DS FA Bn staff, Bn TFs FSOs, and other elements operating in the Bde AO submit reports necessary to deconflict terrain requirements. [FM 101-5, Chap 3]

7) The DS FA battalion FDO and FDC section obtain information related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-3-02-2320; FM 6-20-1 pp. 3-3; TC 6-40, TC 6-40A]

a) Changes from the DS FA battalion commander, DS FA battalion S3, and brigade FSO to brigade commander's guidance and mission concept and requirements for information to assist in the development of the DS FA battalion commander's criteria.

b) Intelligence information from the DS FA battalion S2, brigade FSE, and DIVARTY S2 via IFSAS/AFATDS artillery target intelligence (ATI) files.

c) Changes from the brigade FSO, DS FA battalion S3, and Bn TF FSOs to preplanned and scheduled fires as a result of changes to the brigade tactical situation.

d) Changes to firing parameters.

(1) Met updates

(2) Survey refinements.

(3) Registration data.

(4) Target location information.

e) Updated information from battery FDCs.

f) Requirements for subsequent attack of HPTs based on BDA provided by the S2.

8) The brigade FSCOORD, brigade FSO, and brigade FSE section obtain fire support information related to integrating and coordinating fire support for the brigade. [FM 6-20, pp. 2-22, 2-23; FM 6-20-40, Chap 4; ARTEP 71-3-MTP, Task 71-3-9002/1b, 9003/1a; 9004/1a]

a) Changes from the brigade commander to guidance, mission concept, and information requirements.

b) Changes to the tactical situation.

c) Intelligence information from the DS FA battalion S2, brigade S2, division FSE, and DIVARTY TOC.

(1) Enemy capabilities to attack the DS FA battalion with direct or indirect fires.

(2) Responses to information and intelligence queries previously submitted by the DS FA battalion.

(3) Target acquisition assets and plans related to tracking of HPTs.

d) FA status from DS FA battalion S3.

(1) Current and projected locations of DS FA battalion and reinforcing units.

(2) Current and projected unit weapons status.

(3) Current and projected ammunition status.

e) FA status from DIVARTY and division FSE.

(1) Organization for combat (including general support [GS], general support reinforcing [GSR] FA).

(2) Locations and status of GS and GSR batteries and platoons.

(3) Status and locations of counter-battery radars.

(4) Status and timing of met support.

(5) Division or corps directed FSCM.

f) Task organization, personnel and equipment status, and status of execution of fire support plans from Bn TF FSOs.

(1) COLTs.

(2) FISTs.

(3) Mortars.

(a) Mortar tubes and vehicles.

(b) Personnel.

(c) Locations of sections and FDCs.

(d) Ammunition status.

1 Ammunition types.

2 Ammunition quantities.

g) Bottom-up refinements regarding projected locations, targets, FPFs, FSCM, and time-lines from:

(1) Maneuver Bn TF FSOs.

(2) Scout platoons.

(3) COLTs and other observers.

h) Availability and locations of EW assets from the DS FA battalion S2.

i) Information necessary to refine plans for coverage of obstacles and adjustments to FASCAM employment from the brigade engineer.

j) Fire support requirements from the DS FA battalion S4 and forward support battalion (FSB) commander to support the BSA.

9) The DS FA battalion RSO obtains information concerning the DS FA battalion survey operations regarding integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-8-02-2700; FM 6-2, pp. 15-13, 14]

a) Changes from the DS FA battalion commander on survey priorities.

b) Intelligence data from the DS FA battalion S2.

(1) Enemy activity affecting survey operations.

(2) Impact of weather and terrain on survey capabilities.

(3) Requirements for survey to link sensor information.

(4) Impact of NBC hazards on survey operations.

c) Information from the DS FA battalion S3.

(1) Status of movement of the DS FA battalion and reinforcing units that may affect survey operations.

(2) Changes to task organization that affect survey priorities.

(3) Additional survey requirements from the brigade.

d) Status of DS FA battalion survey teams.

(1) Equipment.

(2) Personnel.

(3) Response to time-lines.

10) The DS FA battalion CMLO obtains information concerning friendly and enemy NBC status related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 03-3-C201, C202]

a) Changes from the DS FA battalion commander to guidance, mission concept, and information requirements.

b) NBC warning and reporting system updates from the brigade and DIVARTY.

c) Status and location updates for NBC equipment and supplies from subordinate units and the DS FA battalion S4.

d) Status and location of decontamination and reconnaissance assets from the brigade CMLO.

e) NBC monitoring and surveillance reports from subordinate DS FA battalion units.

f) Information from the DS FA battalion S2 and intelligence section which confirms or refutes the estimate of NBC threat and requirements.

g) Changes to brigade and subordinate DS FA battalion units' plans in terms of projected locations, decontamination requirements, and time-lines.

11) The DS FA Bn SO and communications section obtain information concerning DS FA battalion communications requirements and capabilities related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-8-01-4000, 06-4-01-4800, 06-1-01-4100]

a) Changes from the DS FA battalion commander to guidance, mission concept, and information requirements.

b) Status of communications links from DS FA battalion CPs to brigade, DIVARTY, reinforcing units, and other major subordinate command CPs.

c) Updates from subordinate DS FA battalion units on communications status.

(1) Status of communications links from DS FA battalion CPs.

(2) Equipment (e.g., secure and non-secure, digital, voice).

(3) Signal operating instructions (SOI).

(4) Availability of subordinate unit communications personnel and equipment.

d) Information from the DS FA battalion S2 and intelligence section.

(1) Information which confirms or refutes the estimate of communications requirements.

(2) Updates enemy electronic and communication capabilities that may impact on the use of directional antennae and net discipline.

e) Status reports from DS FA battalion retransmission (retrans) stations.

(1) Positioning.

(2) Equipment serviceability and capability.

(3) Communication ranges and dead spaces.

f) Information from the DS FA battalion XO and DS FA battalion S3 about changes to proposed DS FA battalion CP locations and projected time-lines.

g) Changes to Bn TF and subordinate units' plans in terms of projected locations and time-lines.

12) The DS FA battalion S1 section obtains information related to integrating and coordinating fire support for the brigade: [ARTEP 6-115-MTP, Task 12-1-C404; FM 101-5, p. C-5; FM 6-20-1, pp. 7-7, 7-21, 7-22]

a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and requirements for information.

b) Personnel status from subordinate and supporting units.

(1) Personnel status reports.

(2) Critical military occupational specialties and grade shortages.

(3) Absent without leave (AWOL).

(4) Casualty feeder reports.

c) Personnel information from DIVARTY S1 and division adjutant general.

(1) Availability of replacements and replacement operations. (including weapons system replacement operations [WSRO]).

(2) Postal services.

(3) Morale, welfare, and recreation (MWR) support.

d) Morale and discipline indicators from DS FA battalion special staff officers and battery commanders.

(1) Battery reports of stragglers, AWOLs, and absences from place of duty.

(2) Sick call and stress casualties from the DS FA battalion surgeon.

(3) Advice from the CSM on the state of morale and discipline.

e) FSB support capabilities from the FSB support operations center.

f) Information from the supported brigade MP platoon leader concerning EPW processing and evacuation requirements.

13) The DS FA battalion S4 section obtains information related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 06-3-01-6430; FM 101-5, p. C-9; FM 6-20-1, pp. 7-10, 7-11]

a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and information requirements.

b) Information from the DS FA battalion S2 and intelligence section which confirms or refutes estimates of the logistical situation.

c) Logistics reports from batteries and supporting units.

(1) Status of supplies by class of supply.

(2) Equipment readiness.

(3) Task organization and status of CSS elements:

(a) FSB.

(b) Field train CP/battalion supply operations center (BSOC).

(c) Combat trains CP/administrative and logistics center (ALOC).

(d) Maintenance, transportation, and supply updates from the brigade S4 and FSB support operations center (including plans for WSRO).

14) The DS FA battalion surgeon obtains information related to integrating and coordinating fire support for the brigade. [ARTEP 6-115-MTP, Task 08-3-C003; FM 6-20-1, pp. 7-23, 7-24]

a) Changes from the DS FA battalion commander to guidance, mission concept, priorities, and information requirements.

b) Updates on capabilities versus requirements for treatment.

(1) Patient load and disposition.

(2) Mass casualty situations requiring external assistance.

c) Capabilities of ground evacuation and aerial MEDEVAC from the brigade surgeon.

d) CL VIII supply status.

(1) Updates from the division medical supply officer on availability.

(2) On-hand quantities to meet current and anticipated requirements.

e) Additional medical support capability from the division main support battalion (MSB).

f) Supporting unit medical support status.

(1) Positioning and readiness of medical assets.

(2) Capability to receive, triage, and evacuate casualties.

g) Changes to supporting unit plans in terms of projected locations and times.

15) The DS FA battalion HHB commander obtains information necessary to support the TOC and the ALOC. [FM 6-20-1, pp. 3-1, 3-6, 7-1-10]

a) Obtains changes to the DS FA battalion commander's guidance, mission concept, and information requirements from the DS FA battalion S3.

b) Obtains information from the DS FA battalion S2 and intelligence section which confirms or refutes enemy threat to the TOC or ALOC.

c) Obtains anticipated movement times and projected locations for the TOC and ALOC from the DS FA battalion XO and S3.

d) Obtains information from attachments and supporting agencies concerning space, supply, and support requirements.

b. The DS FA battalion CPs evaluate acquired information, update products, and maintain status related to integrating and coordinating fire support for the brigade. [FM 6-20-1 p. 3-1; FM 101-5, Chap 6; ARTEP 6-115-MTP, Task 06-1-02-2500]

1) The DS FA battalion S2 and intelligence section evaluate intelligence information, and update IPB products. [ARTEP 6-115-MTP, Task 06-1-02-2500]

a) The DS FA battalion intelligence section tracks the enemy.

(1) Location (confirmed and suspected).

(2) Activity.

(a) Indications of possible intent.

(b) Enemy reactions to friendly battle techniques.

(c) Specific enemy actions triggered by friendly actions or events.

(3) Adherence to, or deviation from, postulated enemy COAs.

(4) Enemy losses are analyzed to determine strengths and capabilities.

b) The DS FA battalion S2 and intelligence section evaluate intelligence information. [ARTEP 6-115-MTP, Task 06-3-01-2512]

(1) Changes to guidance, direction, and information.

(2) Desired DS FA battalion endstates compared to current intelligence situation, trends, and IPB.

(3) Information which confirms or refutes IPB information relative to achieving the DS FA battalion commander's intent:

(a) Updates PIR related to fire support. [FM 6-20-1, p. 3-5]

(b) NAIs and TAIs.

(4) Positioning of assets to detect and track HPTs, provide observation for attack of HPTs, and provide report of target effects for BDA on HPT following attack.

(5) Indicators of changes in enemy intentions or reactions:

(a) NBC weapons usage or activity as prelude to offensive operations.

(b) Presence of reconnaissance forces as a prelude to attack.

(c) Conduct of counter-reconnaissance operations as an indicator of defense.

(d) Presence and massing of maneuver forces as the initiation of offensive operations.

(e) Increase of enemy helicopter activity as an indication of air assault operations.

(f) Increase in enemy fighter activity and massing of transport fixed wing aircraft as indicators of airborne assault or the start of offensive operations.

(g) Increase of enemy field artillery and rocket unit activity.

(h) Presence and nature of activity of enemy engineer systems.

(i) Meconing, interference, jamming, interception and other changes in enemy electromagnetic activity as prelude to offensive operations.

c) The DS FA battalion S2 and intelligence section update intelligence products. [ARTEP 6-115-MTP, Task 06-3-01-2510,2511]

(1) Updated intelligence estimate (may or may not be in written form).

(2) SIT TEMP.

(3) Event template.

(4) MCOO in coordination with the DS FA battalion S3.

(5) Intelligence portion of the DST.

(6) Intelligence collection plan.

(7) Intelligence database.

(a) Enemy OB.

(b) ATI file.

(8) Intelligence overlays and graphics.

(9) DS FA battalion INTSUMs.

(10) Intelligence journal/log.

(11) Ensures all subordinate and reinforcing elements are kept informed of the enemy situation.

(a) Firing batteries.

(b) Survey teams.

(c) Retransmission stations.

(d) Wire teams.

(e) Radars.

(f) ALOC.

(g) BSOC.

(12) Coordinates intelligence aspects of DS FA battalion ground and air defense plans with batteries. [FM 6-20-1, p. 3-5]

(13) Advises the DS FA battalion S3 on employment of any target acquisition resources organic or attached to the DS FA battalion and recommends sectors of search. [FM 6-20-1, p. 5-1]

2) The DS FA battalion S3 section evaluates operational information and updates operational products. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120, 2150]

a) The DS FA battalion S3 section evaluates information. [ARTEP 6-115-MTP, Task 06-3-01-2120]

(1) Changes to guidance/direction and information.

(2) Information which confirms or refutes IPB information which may affect achieving the DS FA battalion commander's intent.

(3) Desired DS FA battalion endstates are compared with what is possible based on the current DS FA battalion operational status, FASP, and trends.

(a) Battery status.

(b) CSS status.

(4) Impact of changes to the brigade maneuver plans on the FASP.

(5) Results of coordinating plans with brigade and subordinate fire support units. [FM 6-20-1, p. 3-5]

(6) DS FA battalion OPSEC based on information received from brigade and internal DS FA battalion sources.

b) The DS FA battalion S3 section updates operations products. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2120, 2150]

(1) Maintains situation map (SITMAP), target planning maps, and fire support overlays, which reflect: [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(a) Movement, routes, and locations of collection and target acquisition assets. [FM 6-20-40, p. 2-23].

(b) Current friendly and enemy situation. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(c) Unit boundaries. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190].

(d) Locations of maneuver and artillery support elements. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(e) FSCM. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(f) FASCAM. [ARTEP 6-115-20-MTP, Task 06-3-02-1130, 1190]

(2) Operational portion of the DST.

(3) Synchronization matrix.

(4) FSEM.

(5) MCOO based on input from the DS FA battalion S2 and CMLO.

(6) Updated operations estimate (may or may not be in written form).

(7) DS FA battalion status boards and charts which track tube and ammunition status.

(8) DS FA battalion operations journal/log.

3) The DS FA battalion FDO and FDC section evaluate information and update FDC products. [ARTEP 6-115-MTP, Task 06-3-02-2130, 3000, 2320, 2340, 2350]

a) The DS FA battalion FDO and FDC section evaluate information. [ARTEP 6-115-MTP, Task 06-3-02-2320]

(1) Need to update initialization data based on changes to firing parameters.

(2) Refinements/changes from brigade and Bn TF FSO/FSEs.

(a) Fire plans.

(b) Target lists.

(c) Schedule of fires.

(d) FSCM.

(e) Target value analysis HPTs.

(f) Location of friendly units.

(3) Information from other staff officers.

(a) Status of survey.

(b) Ammunition status.

(c) Availability of radar.

(4) Information and status of batteries.

(a) Units in ready to fire status.

(b) Ammunition status.

(c) Latest met message received.

(d) Determines need for registration.

b) The DS FA battalion FDO and FDC section update fire direction products.

(1) Changes to commander's criteria entered in IFSAS/ AFATDS.

(2) SITMAP, FSCM, and location of friendly units.

(3) All initialization data and confirm positive check of firing data.

(4) Firing parameters based on updated met messages.

(5) All fire plans, schedule of fires, groups of fires, FPFs, and other defensive fires with most recent firing data.

(6) Current target overlay. [FM 6-20-1, p. 3-5]

(7) Planned targets and targets of opportunity. [FM 6-20-1, p. 3-5]

(8) Observer locations and status.

(9) Requests and inputs including firing unit information, formatted response such as AFU; UPDATE; BAMOUP.

4) The brigade FSO and brigade FSE section evaluate information and update fire support products. [ARTEP 71-3-MTP Task 71-3-9001, 9002]

a) The brigade FSO and FSE sections evaluate information. [ARTEP 71-3 MTP, Task 71-3-9001/2,3]

(1) Changes to guidance/direction.

(2) Desired brigade endstates with what is possible based on current fire support situation and trends.

(3) Changes to the brigade fire support plan which ensure synchronization with Bn TF fire support plans.

(4) Changes to FA task organization and locations or GS and GSR FA units.

(5) Information which confirms or refutes IPB information relative to achieving the brigade commander's intent.

(6) Changes to engineer FASCAM requirements in the fire support plan.

(7) Changes to Army aviation and Air Force requirements which cause refinements to the fire support plan.

(8) FSCM imposed by division or other headquarters.

(9) Status of fire support systems due to battle loss to include:

(a) Howitzers.

(b) FIST/FIST-vehicle (FIST-V).

(c) COLT/FIST-V.

(d) Target acquisition systems.

(10) Changes which should lead to convening the targeting and/or A2C2 teams.

b) Update fire support products. [ARTEP 71-3-MTP, Task 71-3-9002]

(1) Updated fire support estimates (may or may not be in written form).

(2) FSEM.

(3) Target lists.

(4) HPT list.

(5) Fire support graphics.

(6) Priority targets.

(7) FSCM.

(8) Observation plan.

(9) Aviation plan (with brigade air liaison officer (ALO) and Army aviation LNO):

(a) ACAs.

(b) SEAD.

5) The DS FA battalion RSO evaluates information and updates DS FA battalion survey products. [ARTEP 6-115-MTP, Task 06-8-02-2700]

a) The DS FA battalion RSO evaluates information. [ARTEP 6-115-MTP, Task 06-8-02-2700]

(1) Changes to guidance/direction, information, and priorities.

(2) Desired DS FA battalion endstates with what is possible based on current survey situation, status of survey teams, and trends.

(3) Evaluates changes to FA task organization to determine impact on survey plan.

(4) Evaluates changes to brigade survey priorities.

(5) Coordinates survey requirements directly with battery commanders. [FM 6-20-1, p. 3-5]

b) The DS FA battalion RSO updates survey products.

(1) Updated survey estimate (may or may not be in written form).

(2) Survey plan.

(3) Performs general reconnaissance and observation as directed by the DS FA battalion S3 and S2. [FM 6-20-1, p. 3-5]

6) The DS FA battalion CMLO evaluates information and updates DS FA battalion NBC products. [ARTEP 3-4-MTP, Task 3-4-0003, 0004, 0007, 0017]

a) The DS FA battalion CMLO evaluates information. [ARTEP 3-117-40-MTP, Task 3-4-0004, 0007]

(1) Changes to guidance, direction, and information.

(2) Desired DS FA battalion endstates with what is possible based on current NBC situation and trends.

(3) Information which confirms or refutes IPB information regarding achieving the commander's intent.

(4) Answers to intelligence queries which alter initial assessment of enemy NBC capabilities.

(5) Adjustments to plans from subordinate units which affect DS FA battalion NBC plans.

(6) Changes to divisional defensive NBC capabilities.

b) The DS FA battalion NBC section updates NBC products. [ARTEP 3-117-40-MTP, Task 3-4-0003; 0017]

(1) Updated NBC estimate (may or may not be in written form).

(2) MOPP analysis.

(3) Enemy NBC capabilities.

(4) NBC equipment and supplies inventories.

(5) NBC overlays and graphics.

(6) Provides the DS FA battalion S2 with locations of contaminated areas for inclusion in MCOO.

7) The DS FA Bn SO and communications section evaluate information and update DS FA battalion communication products. [ARTEP 6-115-MTP, Task 06-5-02-4000, 06-1-01-4100]

a) The DS FA battalion communications section evaluates information.

(1) Changes to guidance, direction, and information.

(2) Desired DS FA battalion endstates with what is possible based on current communication situation and trends.

(3) Information which confirms or refutes IPB information regarding achieving the DS FA battalion commander's intent.

(4) Answers to intelligence queries which alter initial estimate of enemy electronic and communications capabilities.

(5) Adjustments to plans from DS FA battalion CPs and subordinate DS FA battalion units on DS FA battalion communications planning.

(6) Results of communications checks.

(7) Performs communications reconnaissance and survey to assist the DS FA battalion S3 in siting key elements of the DS FA battalion, to include retrans stations. [FM 6-20-1, p. 3-6]

b) The DS FA Bn SO and communications section update communications products.

(1) Updated signal estimates (may or may not be in written form).

(2) Communications network overlay, area coverage overlay, and dead space overlay.

(3) SOI.

8) All DS FA battalion CSS officers (DS FA battalion XO, DS FA battalion S1, DS FA battalion S4, DS FA battalion surgeon) evaluate information and update CSS products. [FM 63-20, Chap 3, 6; FM 6-20-1, Chap 7; ARTEP 6-115-MTP, Task 06-3-01-2170, 12-1-C404, 06-3-01-6430, 08-3-C002, 06-3-01-6300]

a) The DS FA battalion CSS officers evaluate information.

(1) Evaluate desired DS FA battalion endstate with current and projected personnel, maintenance, transportation, medical, and supply status.

(a) Adequacy of CSS for the brigade main effort.

(b) Adequacy of CSS for the brigade secondary effort.

(2) Information which confirms or refutes IPB information which may affect achieving the DS FA battalion commander's intent.

(3) Answers to intelligence queries requested by CSS officers which could affect the initial CSS plan.

(4) Adjustments to plans from subordinate and supporting units which affect DS FA battalion CSS plans.

b) The DS FA battalion CSS officers update CCS products.

(1) The DS FA battalion S1 section updates personnel information. [ARTEP 6-115-MTP, Task 12-1-C404]

(a) Updated personnel services estimate (may or may not be in written form).

(b) Personnel status of subordinate and supported units.

(c) Casualty feeder reports.

(d) Personnel priorities as directed by the DS FA battalion commander.

(2) The DS FA battalion S4 section updates logistical information. [ARTEP 6-115-MTP, Task 06-3-01-6430]

(a) Maintenance, supply, and transportation portions of updated logistics estimates (may or may not be in written form).

(b) Supply:

1 Usage and percent fill of combat basic loads.

2 Configuration and location of immediate and emergency resupply (e.g., CL III, V) loads and push packages.

3 Adequacy of CSS supply assets.

4 Supply priorities as directed by the DS FA battalion commander.

5 Establishment and fill of stockpiles and caches.

(c) Maintenance: [ARTEP 6-115-MTP, Task 06-3-01-6300]

1 Number and type of equipment systems on hand and operational.

2 Systems non-mission capable and repairable.

3 Projections for the repair and return of fighting vehicle and other essential equipment.

4 On-hand CL IX, authorized stockage list (ASL), and prescribed load list (PLL) stockage levels.

5 Maintenance priorities and guidelines as directed by the DS FA battalion commander.

(d) Transportation:

1 Schedules and priorities.

2 Status of supplies, equipment, and materials requiring transport.

3 Availability of ground transport assets.

4 Availability of air transport assets.

5 Status of logistics packages.

6 Transportation recovery and back-haul plans.

7 MSR and ASR traffic and route conditions.

(3) The DS FA battalion surgeon updates medical information. [ARTEP 6-115-MTP, Task 08-3-C0002]

(a) MEDEVAC capabilities.

(b) CL VIII stocks and resupply activities.

(c) Reinforcement and reconstitution of medical assets.

(d) Disposition and capability of DS FA battalion medical assets.

(e) Medical priorities as directed by the DS FA battalion commander.

9) The DS FA battalion HHB commander evaluates information.

a) Evaluates capability to move, secure, and support the DS FA battalion CPs.

b) Provides assessment of capabilities versus requirements to move, secure, and support the TOC to the DS FA battalion S3.

10) The DS FA battalion CPs maintain status. [FM 6-20-1, pp. 3-1 thru 3-6]

a) DS FA battalion TOC maintains status. [FM 6-20-1, pp. 3-1 thru 3-6]

(1) Information which supports the DS FA battalion CCIR.

(2) Current and projected combat power status of subordinate units (e.g., green-amber-red).

(3) Current O&I map.

(a) Operations overlay (DS FA battalion, brigade, and reinforcing units).

(b) Intelligence overlay.

(c) SIT TEMP overlay.

(d) Event template overlay.

(e) MCOO.

(f) Fire support overlay.

(4) Status of key communications links.

(5) CSS overlays and information per DS FA battalion TSOP.

(6) Intelligence information from brigade, DIVARTY, and higher headquarters.

(7) Dispositions of collection assets.

(8) Information on external units conducting R&S and security operations to prevent fratricide.

(9) Dispositions and status of patrols and other R&S and security forces.

(10) Status of tactical operations to ensure compliance with stated mission time-lines.

(11) Obstacle and survivability position construction and progress as compared to time-lines.

(12) DST.

(13) FSEM.

(14) Synchronization matrix.

(15) Journals/logs.

(16) Status of key communications links.

b) The DS FA battalion ALOC maintains status. [FM 6-20-1, Chap 7]

(1) Current O&I map.

(a) Operations overlay (DS FA battalion, brigade, and reinforcing units).

(b) Rear operations, security, and threat overlay.

(c) Intelligence overlay.

(d) SIT TEMP overlay.

(e) Event template overlay.

(f) MCOO.

(g) Fire support overlay.

(2) DST.

(3) CSS SITMAP and overlays.

(a) MSR and ASR.

(b) CSS locations, current and projected.

(c) Decontamination sites.

(4) Synchronization matrix.

(5) Location and status of petroleum, oil and lubricants awaiting distribution to the batteries.

(6) Location and status of ammunition awaiting distribution to the batteries.

(7) Location of DS maintenance contact team and recovery capability.

c) The DS FA BSOC maintains status.

(1) Current O&I map.

(a) Operations overlay (DS FA battalion, higher, and adjacent units).

(b) Rear operations, security, and threat overlay.

(c) Intelligence overlay.

(d) SIT TEMP overlay.

(e) Event template overlay.

(f) MCOO.

(g) Fire support overlay.

(2) DST.

(3) CSS SITMAP and overlays.

(a) MSR and ASR.

(b) CSS locations, current and projected.

(c) Decontamination sites.

(4) Synchronization matrix.

(5) BSA security plans.

(6) CSS staff journal.

(7) Current and projected personnel and equipment status.

(a) Personnel strength.

(b) Operational readiness rate for equipment.

(c) Status of supplies.

(d) Casualties.

(e) Replacement personnel status and location.

(f) Damaged and non-mission capable vehicles and equipment.

(8) Location and evacuation of EPW and their equipment.

(9) Location and evacuation of displaced persons.

(10) Status of key communications links.

c. DS FA battalion CPs and staff communicate information [FM 6-20-1, pp. 3-1 thru 3-3; FM 101-5, Chap 5]

1) All DS FA battalion CPs and staff disseminate information. [FM 6-20-1, pp. 3-1 thru 3-3]

a) Provide briefings to the DS FA battalion commander on the status of mission.

(1) Focus briefings on CCIR.

(2) Staff provides updates based on commander's requirements as FSCOORD and DS FA battalion commander.

b) Each staff representative communicates critical information needed to:

(1) Coordinate DS FA battalion actions and plans.

(2) Monitor the situation.

(3) Direct DS FA battalion actions.

c) All DS FA battalion staff officers remain alert for and ensure that critical information they receive is passed to other DS FA battalion staff officers who require the information as soon as it is received.

d) Continually assess and report risks and hazards to mission accomplishment and force protection.

4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Section IV; ARTEP 6-115-20-MTP, Task 06-2-02-1000, 06-3-02-1100, 1130-1190, 1300, 1390, Battle Command, p. 12; FM 6-20-40, Chap 1, 2; FM 101-5, Chap 2, 4]

c. The DS FA battalion staff coordinates internally and with higher, adjacent, and supporting elements to coordinate the FRAGO. [FM 101-5, App B]

2) The DS FA battalion S3, at the TOC, must analyze the current FRAGO in light of current brigade, adjacent, and supporting unit OPORDs to preclude conflict.

5. **The direct support field artillery battalion command posts manage and maintain command, control, and communications.**

a. DS FA battalion CPs manage means of communicating information. [FM 101-5, Chap 6, App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

1) The DS FA battalion commander employs an "information manager" from the staff (usually the DS FA battalion S3): [FM 101-5; Chap 6, App B]

a) Facilitates the flow of information and communication of information from staff members and subordinate units.

b) Outlines and monitors the performance and responsibilities of the staff in processing mission information, status of FA units, and the DS FA battalion commander's information requirements.

c) The DS FA battalion S3 at the TOC manages communication: [ARTEP 6-115-MTP, Task 06-06-3-01-2120, FM 6-20-1, pp. 6-7 thru 6-21]

(2) Passes processed information and keeps the DS FA battalion commander updated on new information through concise, consolidated updates.

d) The assistant S3 manages the operations of the TOC and the operations section when the S3 is not available. [FM 6-20-1, p. 3-2]

(1) Coordinates and integrates staff activities.

2) LNOs provide information to the DS FA battalion commander and staff and to the headquarters they represent. [FM 101-5, App L]

a) Responses to specific questions asked of LNOs.

b) Unit locations, activities, capabilities, status, and intentions.

c) Coordination problems.

(1) Inability to reach/meet with specific people or staff positions.

(2) Receipt of information which invalidates or should change estimates and plans.

d) Issues.

3) All DS FA battalion CPs eavesdrop on lower and adjacent unit command and O&I nets for information. [FN]

4) All DS FA battalion CPs ensure that information on the situation is communicated between staff officers during shift changes. [FM 71-3, p. 3-25]

a) Enemy activities.

b) Status of subordinate units.

c) On-going staff actions which must be monitored, tracked, and completed.

d) Time-lines and suspense which must be met.

e) Planning for future missions.

5) All DS FA battalion CPs communicate routine information per the DS FA battalion TSOP. [FM 101-5, p. 6-5]

6) Trains CPs (ALOC/BSOC).

a) DS FA battalion XO is the second in command of the battalion. He is the senior staff officer of the unit and serves as the primary logistician. [FM 6-20-1, p. 3-4]

(3) Makes face-to-face contact with his counterparts on the brigade, DIVARTY, and FSB staff and ensures that the DS FA battalion is supported with a minimum of confusion or lost effort.

b) The ALOC positions during mission execution to conduct rapid movement of emergency CL III and V forward to support the DS FA battalion. [FM 6-20-1, p. 7-8]

(1) Monitors the DS FA battalion A/L net to determine subordinate unit CSS requirements.

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained**. [FM 6-20-1, Chap 7; FM 6-20, pp. 3-5 thru 3-6]

d. The DS FA battalion commander directs the staff to assist in providing support for the brigade during the brigade consolidation. Normal staff operations continue with emphasis on the following: [FM 101-5, Chap 4; Battle Command Techniques and Procedures, Chap 2, 3; FM 71-3, App H]

1) The DS FA battalion XO:

a) Monitors refit and resupply operations of the batteries.

2) The DS FA battalion S2:

a) Continues to update the intelligence estimate.

3) The DS FA battalion S3:

a) Continues to monitor the current situation.

b) Continues to monitor all activities in the brigade deep battle area and supervises the activities in the brigade rear battle area.

g) Together with the DS FA battalion S2 and brigade FSO, revises the fire support plan to support continuing operations

h) Monitors status of DS FA battalion units.

Outcome 3

Tactically sound recommendations are developed and critical information is communicated by the DS FA Bn staff and subordinate leaders.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

a. The DS FA battalion commander directs subordinate forces.

1) The DS FA battalion commander takes actions to ensure that subordinate leaders have a clear understanding of his intent and concept. Actions include: [FM 101-5, Chap 1, 4, App B, D, H, J; Battle Command Techniques and Procedures, (April 21, 1995), Chap 2, 4; Battle Command, pp. 10-32]

a) Meeting with subordinate commanders and leaders to receive information and issue directions.

2) The DS FA battalion commander positions himself on the battlefield where he can best fulfill both his responsibilities as the FSCOORD to the brigade commander and as the DS FA battalion commander.

a) As the brigade FSCOORD, positions himself where he can best influence the battle and assist the brigade commander in integrating and coordinating indirect fire support.

(1) With the brigade commander.

(2) In the FSE.

b. The DS FA battalion commander ensures that each battlefield operating system (BOS) is integrated and coordinated with other BOS during delivery of fires and execution of battle. [FM 101-5, pp. H-36 - H-42]

1) The DS FA battalion commander integrates intelligence requirements with the other BOS.

b) The DS FA battalion S2 processes information and disseminates updated intelligence of enemy situation, terrain, and weather.

(1) Descriptions and locations of obstacles, fortifications, and known or potential contaminated areas and enemy NBC delivery systems.

3) The DS FA battalion commander integrates and coordinates fire support with the other BOS.

a) The FA support plan (FASP) is coordinated with the brigade fire support plan.

(2) Last minute modifications to the plan must be approved by the brigade commander through the FSCOORD.

(3) The DS FA battalion commander must ensure that procedures are in place that allow the staff to quickly assess and respond to new information.

(5) Staff members, based on their assessments, will:

(a) Change the schedule of fires or preplanned target list by substituting higher priority targets.

(b) Delete suspected targets.

(c) Designate on-call targets.

(d) Shift fires from planned targets.

4) The DS FA Cdr integrates and coordinates mobility/countermobility/ survivability with the other BOS.

a) Verifies that fires are planned to cover all obstacles and that responsibility for triggering those fires is coordinated between the maneuver forces and their fire support representatives.

b) Coordinates requirements for delivery of FASCAM with battery movement plans, requirements to service other HPTs, and ammunition resupply requirements.

c) Coordinates requirements for engineer support to DS FA units for position improvement and survivability enhancements.

d) The battalion CMLO coordinates decontamination support and site location with the brigade CMLO.

7) The DS FA battalion commander integrates and coordinates command and control with the other BOS.

c) CPs and staff continue to support the mission.

(1) Receive, process, and disseminate information.

(2) Move and position to support the DS FA battalion commander during the battle.

(3) Coordinate and integrate combat multipliers.

(4) Exchange information with brigade HQ, DIVARTY HQ, and CP of reinforcing FA battalion.

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.** [TRADOC Pam 11-9, Section IV; Battle Command, pp. 43 and 65; ARTEP 6-115-20-MTP; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]

a. The DS FA battalion CPs acquire information to assist the DS FA battalion commander. [TRADOC Pam 11-9, Chap 7 and App D]

1) The DS FA battalion staff members, operating out of the DS FA battalion tactical operations center (TOC) directed by the DS FA battalion commander or the DS FA battalion SOP, obtain information during the execution of the battle that is:

b) Focused on satisfying the DS FA battalion CCIR. [FM 101-5, pp. 6-8, 6-11, 6-16, and C-4]

2) The DS FA battalion S3 manages the flow of information in the DS FA battalion TOC and establishes a system to keep the DS FA battalion commander informed. [FM 101-5, pp. 6-2, 6-11, 6-34; ARTEP 6-115 MTP, Task 06-3-01-2110]

3) All DS FA battalion staff officers, LNOs, and subordinate leaders obtain information; they commonly: [FM 101-5, pp. 3-84, C-4, Chap 6, App A]

a) Focus information collection according to CCIR, PIR, and IR, and immediately communicate any response to CCIR to the DS FA battalion commander, XO, and S3. [FM 101-5, pp. 6-8, 6-11, 6-16, C-4]

b) Obtain information relevant to fulfilling their areas of responsibility for the DS FA battalion's execution of fire support for the brigade battle in order to: [FM 101-5, pp. 6-33, 6-34]

(1) Monitor and modify activities as necessary.

(2) Verify/modify coordination between the DS FA battalion and adjacent units.

c) Provide appropriate recommendations to the DS FA battalion commander relative to their functional areas. [FM 101-5, pp. 6-33, C-2]

4) The DS FA battalion CSM obtains information during visits and inspections, and advises the DS FA battalion commander. [AN]

6) DS FA battalion S3 section obtains operations information related to synchronizing fire support for the brigade (e.g., changes to mission, enemy, troops, terrain and time (METT-T), and status of BOS). [FM 101-5, pp. C-8, C-9; ARTEP 6-115-MTP, Task 06-3-01-2120]

b) From subordinate DS FA battalion units. [ARTEP 6-115-MTP, Task 06-3-01-2110, 2150]

(3) Recommendations from battery commanders on changes to the FASP based on their current status and projected status.

d) Brigade FSE, DS FA Bn staff, Bn TFs FSOs, and other elements operating in the Bde AO submit reports necessary to deconflict terrain requirements. [FM 101-5, Chap 3]

b. The DS FA battalion CPs evaluate acquired information, update products, and maintain status related to integrating and coordinating fire support for the brigade. [FM 6-20-1 p. 3-1; FM 101-5, Chap 6; ARTEP 6-115-MTP, Task 06-1-02-2500]

1) The DS FA battalion S2 and intelligence section evaluate intelligence information, and update IPB products. [ARTEP 6-115-MTP, Task 06-1-02-2500]

c) The DS FA battalion S2 and intelligence section update intelligence products. [ARTEP 6-115-MTP, Task 06-3-01-2510,2511]

(12) Coordinates intelligence aspects of DS FA battalion ground and air defense plans with batteries. [FM 6-20-1, p. 3-5]

(13) Advises the DS FA battalion S3 on employment of any target acquisition resources organic or attached to the DS FA battalion and recommends sectors of search. [FM 6-20-1, p. 5-1]

c. DS FA battalion CPs and staff communicate information [FM 6-20-1, pp. 3-1 thru 3-3; FM 101-5, Chap 5]

1) All DS FA battalion CPs and staff disseminate information. [FM 6-20-1, pp. 3-1 thru 3-3]

a) Provide briefings to the DS FA battalion commander on the status of mission.

(1) Focus briefings on CCIR.

(2) Staff provides updates based on commander's requirements as FSCOORD and DS FA battalion commander.

b) Each staff representative communicates critical information needed to:

(1) Coordinate DS FA battalion actions and plans.

(2) Monitor the situation.

(3) Direct DS FA battalion actions.

c) All DS FA battalion staff officers remain alert for and ensure that critical information they receive is passed to other DS FA battalion staff officers who require the information as soon as it is received.

d) Continually assess and report risks and hazards to mission accomplishment and force protection.

2) The DS FA battalion S2 and intelligence section communicates enemy's situation, evaluations of enemy capabilities, and analyses of PIR, IR, and routine information to: [ARTEP 6-115-MTP, Task 06-3-01-2511]

a) Brigade and DIVARTY S2.

b) Subordinate/supporting unit S2s.

c) DS FA battalion TOC.

d) DS FA battalion ALOC.

e) DS FA BSOC.

f) Adjacent unit headquarters in support of their collection efforts.

3) The DS FA battalion S3 section communicates operational information. [ARTEP 6-115-MTP, Task 06-3-01-2120, 2150]

a) Updated products including:

(1) DS FA battalion WARNOs and FRAGOs.

(2) Coordinating instructions.

(3) Reports on the DS FA battalion situation.

(4) Evaluations of DS FA battalion execution.

(5) Answers to CCIR and IR.

b) To: [FM 101-5, App A]

(1) DS FA battalion XO.

(2) DS FA battalion staff.

(3) Subordinate and supporting units.

(4) DS FA battalion ALOC.

(5) Brigade main CP.

(6) Brigade tactical CP.

c) The DS FA battalion S3 section communicates with adjacent units to coordinate: [ARTEP 6-115-MTP, Task 06-3-01-2180]

(1) Checkpoints, coordination points, phase lines, and contact points.

(2) Direct and indirect fire plans, control measures, and restrictive fire lines (RFL).

4) The DS FA battalion FDO and FDC section communicate operational information:

a) Refinements to the fire plan.

b) Target lists.

c) Support geometry (IFSAS/AFATDS input).

d) Attack criteria.

e) Subscriber tables.

f) Instructions for degraded operations and continuity of operations.

g) Enter and disseminate met messages.

5) The brigade FSO and FSE section communicate brigade fire support situation and analyses of CCIR, IR, and routine information. [FM 101-5, App A; ARTEP 71-3, task 71-3-9002/2,3]

a) To: [FM 101-5, App A; ARTEP 71-3 MTP, Task 71-3-9002/2, 3]

(1) Brigade engineer.

(2) Brigade S2.

(3) Brigade S3.

(4) DIVARTY O&I section.

(5) Division FSE.

(6) DS FA battalion S3.

(7) Subordinate Bn TF FSOs.

(8) ALO and Army aviation LNO.

(9) FSB commander for rear operations.

(10) DS FA battalion staff officers who need the information.

6) The DS FA battalion CMLO communicates the DS FA battalion NBC situation and analyses of CCIR, IR, and routine information. [FM 101-5, App A; ARTEP 3-117-40-MTP, Task 3-4-0007; 0009; 0016]

a) To:

(1) Brigade CMLO.

(2) DS FA battalion subordinate commanders and leaders.

(3) Supporting NBC units (e.g., decontamination, reconnaissance).

(4) DS FA battalion staff officers who need the information.

7) The DS FA battalion communications section reports DS FA battalion communications situation and other routine information to other DS FA battalion staff sections and external headquarters and staff officers. [FM 101-5, App A; ARTEP 71-3-MTP, Task 71-3-1102/4]

a) To:

(1) Brigade signal officer.

(2) DS FA battalion subordinate commanders and leaders.

(3) DS FA battalion staff officers who need the information.

b) The DS FA battalion communications section coordinates with adjacent units and brigade headquarters. [AN]

(1) Confirms allocation and locations of signal assets and capabilities.

(2) Acquires signal equipment to supplement DS FA battalion CPs and subordinate DS FA battalion units which require special communications equipment.

8) DS FA battalion CSS officers report administrative and logistical situation and routine information to the DS FA battalion staff and external sources:

a) DS FA battalion subordinate commanders and leaders.

b) Brigade S1, brigade S4, division maintenance management center, and brigade surgeon.

c) FSB and MSB staffs.

d) DS FA battalion staff officers who need the information.

9) The DS FA battalion CSS staff coordinates with the DS FA battalion staff and DS FA battalion units: [FM 101-5, App A]

a) To identify additional requests for support.

(1) Transportation assets (ground and air).

(2) Medical augmentation.

(3) Maintenance support for vehicles and weapons systems and for the recovery of damaged vehicles or the return of repaired vehicles.

b) To coordinate the transportation of supplies and cargo through DS FA battalion units.

c) To coordinate routine, emergency, and critical resupply operations (e.g., delivery times, types and quantities of supplies required.

d) For receiving and processing replacements.

e) To track the evacuation of personnel and casualties.

f) To process awards, decorations, promotions, and legal actions.

g) For security and protection of CSS units operating forward.

10) DS FA battalion S4 coordinates with the DS FA battalion S3 to deconflict terrain requirements and projected locations for:

a) ATPs.

b) ASPs.

c) Forward arming and refuel points.

11) The DS FA battalion CSS staff performs coordination with the FSB and supporting CSS headquarters: [FM 6-20-1, pp. 7-8-10]

a) To process requests for support of the DS FA battalion.

(1) Additional transportation assets.

(2) Medical augmentation and support.

(3) Support of resupply operations.

(4) Intermediate DS/DS/intermediate GS maintenance support for vehicles and weapon systems and for recovery of damaged vehicles or return of repaired vehicles.

b) The DS FA battalion S4 coordinates the transportation of DS FA battalion supplies and cargo through adjacent units based on the locations of the BSA and other brigade or division supply points.

c) The DS FA battalion S4 coordinates routine, emergency, and critical resupply of the DS FA battalion (e.g., delivery times, types and quantities of supplies required).

d) Coordinates with the DS FA battalion S3 and the BAO for the requisition and delivery of CL V (ammunition). [FM 6-20-1, p. 7-2]

e) The DS FA battalion S1 processes awards, decorations, promotions, and legal actions of DS FA battalion personnel.

f) The DS FA battalion S1 coordinates with the DS FA battalion S2 for interrogation of prisoners and with the DS FA battalion S4 for processing of captured equipment and transportation requirements. [FM 6-20-1, p. 7-1]

g) The DS FA battalion S1 receives and processes replacements.

h) The DS FA battalion S1 tracks evacuation of personnel and casualties.

4. **The direct support field artillery battalion commander directs changes to the operation or plan**. [TRADOC Pam 11-9, Section IV; ARTEP 6-115-20-MTP, Task 06-2-02-1000, 06-3-02-1100, 1130-1190, 1300, 1390, Battle Command, p. 12; FM 6-20-40, Chap 1, 2; FM 101-5, Chap 2, 4]

c. The DS FA battalion staff coordinates internally and with higher, adjacent, and supporting elements to coordinate the FRAGO. [FM 101-5, App B]

1) The DS FA battalion staff must inform DS FA battalion elements of outdated/preempted orders, execution products, and annexes containing information that has been superseded by the current FRAGO.

3) The DS FA battalion S3 supervises the staff actions necessary to assist the brigade commander to synchronize the current battle.

4) The DS FA battalion staff understands the DS FA battalion commander's visualization of synchronization requirements and performs coordination necessary to integrate the FRAGO.

5) LNOs communicate the FRAGO and the DS FA battalion commander's intent to their respective headquarters.

5. **The direct support field artillery battalion command posts manage and maintain command, control, and communications**.

a. DS FA battalion CPs manage means of communicating information. [FM 101-5, Chap 6, App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

1) The DS FA battalion commander employs an "information manager" from the staff (usually the DS FA battalion S3): [FM 101-5; Chap 6, App B]

c) The DS FA battalion S3 at the TOC manages communication: [ARTEP 6-115-MTP, Task 06-06-3-01-2120, FM 6-20-1, pp. 6-7 thru 6-21]

(2) Passes processed information and keeps the DS FA battalion commander updated on new information through concise, consolidated updates.

d) The assistant S3 manages the operations of the TOC and the operations section when the S3 is not available. [FM 6-20-1, p. 3-2]

(2) Initiates staff action as directed by the DS FA battalion commander, XO, and S3.

2) LNOs provide information to the DS FA battalion commander and staff and to the headquarters they represent. [FM 101-5, App L]

a) Responses to specific questions asked of LNOs.

b) Unit locations, activities, capabilities, status, and intentions.

c) Coordination problems.

(1) Inability to reach/meet with specific people or staff positions.

(2) Receipt of information which invalidates or should change estimates and plans.

d) Issues.

5) All DS FA battalion CPs communicate routine information per the DS FA battalion TSOP. [FM 101-5, p. 6-5]

6) Trains CPs (ALOC/BSOC).

d) The field trains BSOC locates with the BSA and coordinates all requirements for battalion organic and attached elements with all units in the BSA and with parent units as required.

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained**. [FM 6-20-1, Chap 7; FM 6-20, pp. 3-5 thru 3-6]

d. The DS FA battalion commander directs the staff to assist in providing support for the brigade during the brigade consolidation. The DS FA battalion coordinating and special staff accomplish the following: [FM 101-5, Chap 4; Battle Command Techniques and Procedures, Chap 2, 3; FM 71-3, App H]

1) The DS FA battalion XO:

c) Keeps the DS FA battalion commander informed of the activities of adjacent units.

2) The DS FA battalion S2:

c) Keeps the DS FA battalion commander informed of any change in the enemy situation.

3) The DS FA battalion S3:

f) Ensures that the DS FA battalion XO is aware of the DS FA battalion commander's guidance, intent, and desired endstate for upcoming engagements.

6) The DS FA battalion CSS staff keeps the FA Battalion XO and commander, as well as, when appropriate, the FSB commander or support operations officer, of changes to the CSS situation.

Outcome 4

Sound (feasible, suitable, acceptable) decisions are made by the DS FA Bn Cdr and others within the Bn.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

a. The DS FA battalion commander directs subordinate forces.

2) The DS FA battalion commander positions himself on the battlefield where he can best fulfill both his responsibilities as the FSCOORD to the brigade commander and as the DS FA battalion commander.

a) As the brigade FSCOORD, positions himself where he can best influence the battle and assist the brigade commander in integrating and coordinating indirect fire support.

(1) With the brigade commander.

(2) In the FSE.

b) As the DS FA battalion commander, when required, is in the DS FA battalion area to best exercise his commander duties.

c) Delegates specific duties to his XO and S3 to provide for freedom of movement to execute his duty as brigade FSCOORD.

b. The DS FA battalion commander ensures that each battlefield operating system (BOS) is integrated and coordinated with other BOS during delivery of fires and execution of battle. [FM 101-5, pp. H-36 - H-42]

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7, App D, ARTEP 6-115-20-MTP, Task 06-1-02-1000, 06-2-02-1000, 06-3-02-1100, 1300, 1500, 1600, 06-1-02-1700; FM 6-20-30, Chap 2, App J; FM 101-5, Chap 3, Appendices F, J]

a. The DS FA battalion commander updates his estimate based on his assessment of the current situation and new information: [FM 100-5, pp. 2-14, 15; FM 101-5, pp. 1-4 thru 1-11, 3-85, Chap 4 and App C; FM 71-3, p. 3-2; Battle Command, Leadership and Decision Making]

1) Identifies changes to the mission.

a) The brigade and division commanders' intents.

b) The brigade concept of the operation.

c) The DS FA battalion mission in terms of:

d) Present concept of operation (maneuver and fires).

e) Comparison of the present plan to the current situation.

f) Based on reports from the DS FA battalion staff, LNOs, and subordinate and supporting commanders, analyzes execution of the fire support plan to include:

(1) The adequacy of support for the forces in contact.

(2) Support for the brigade commander's plan.

(3) Synchronization of fire support.

(4) Ability to sustain fire support.

2) Identifies changes to the enemy situation:

a) Validity of estimate.

(1) Changes in enemy strength.

(2) Changes in enemy capabilities.

(3) Changes in projected enemy COA.

(4) DS FA battalion commander's designated essential elements of friendly information (EEFI).

b) Collection plan responsiveness.

(1) Whether PIR and IR are being filled.

(2) Adequacy of DS FA battalion collection assets' positions, activities, and objectives.

(a) FISTs, FOs, and COLTs.

(b) Army aviation elements.

(c) UAVs and ground surveillance radars (GSRs).

(d) Adjacent and forward units.

(3) Need for and adequacy of external information sources.

(a) Forward air controller (FAC) and CAS aircraft.

(b) Brigade staff and assets.

(4) Validity of the initial IPB, threat analysis, and decide criteria to support the detect, deliver, and assess functions.

(a) Sensor collection plan adequate for HPTs.

(b) Trigger points remain valid.

(c) Cueing plan effectiveness.

(d) Targeting cell awareness of target location accuracy requirements.

3) Identifies changes to the friendly ("Troops") situation:

a) Validity of designated friendly forces information requirements (FFIR).

b) Dispositions and locations of:

(1) Brigade units. [ARTEP 71-3-MTP, Task 71-3-3003/3]

(2) DS FA battalion and reinforcing FA battalion and other supporting FA and fire support assets. [ARTEP 6-115-20-MTP, Task 06-3-02-1100/3]

(3) Target acquisition and collection systems. [ARTEP 6-115-MTP, Task 06-1-02-2600, 06-2-02-2001]

c) Composition and task organization changes of subordinate DS FA battalion units. [ARTEP 6-115-MTP, Task 06-2-02-3000, 06-3-01-2150/2]

d) Strength of subordinate units. [ARTEP 6-115-MTP, Task 06-2-02-3000]

e) Peculiarities and weaknesses of subordinate unit preparation and the implementation of the fire support plan. [ARTEP 6-115-MTP, 06-2-02-3000]

f) Vulnerability of friendly units to enemy NBC attacks. [ARTEP 6-115-20-MTP, Task 06-3-02-1240]

g) Loss (e.g., to enemy action, maintenance) of howitzers.

h) Loss (e.g., to enemy action, maintenance) of target acquisition systems, observers, or equipment (e.g., FISTs, COLTs, radars, FOs). [FN]

i) Status and allocation of:

(1) CAS (U.S. Air Force, U.S. Navy, U.S. Marine Corps). [FN]

(2) Naval surface fires.

(3) Attack and observation helicopter support.

(4) Nonlethal attack systems.

j) Changes in munitions availability. [FN]

k) Fire support requirements which exceed the DS FA battalion's and reinforcing battalion's abilities to satisfy, identified requirements as the brigade executes the mission. [FM 6-20-40, Chap 2].

l) Changes to priority targets and the fire support plan resulting from changes to the status of target acquisition and firing units. [FM 6-20-40, pp. 2-22]

m) Changes to FSCM resulting from division guidance and input from subordinate units. [FM 6-20-40, Chap 2]

n) Impact of locations, activities, and intentions of adjacent units (left, right, front, rear, higher) on brigade fire support coordination.

o) Subordinate unit delivery of fires, which include:

(1) Battery commanders' understanding of and actions to achieve the brigade commander's intent and fire support guidance.

(2) Location and execution of target acquisition systems and observers (e.g., FOs, enlisted terminal attack controller, supporting arms liaison team, COLTs).

(3) Batteries' execution of their missions.

(a) Troop leading procedures.

(b) Occupation of firing positions and delivery of fire by batteries.

4) Identifies changes to terrain:

a) Changes to initial terrain estimate and impact of differences on the concept of the operation.

(1) Terrain factors.

(a) Trafficability.

(b) Cant.

(c) Site to crest.

(d) Key terrain.

(e) Avenues of approach.

(2) Requirement for units to occupy alternate positions or to prepare new positions to continue support of operation.

b) Weather and forecasted weather factors' validity.

(1) Visibility (including fog and cloud cover) and light data.

(2) Effects of weather.

(a) Impact on trafficability.

(b) Impact of meteorological data on delivery of fires.

5) Identifies changes to time available:

a) Accomplishment of key mission in accordance with brigade time-lines.

b) Based on what has and has not been accomplished, sufficiency of time available to complete all tasks.

6) The DS FA battalion commander assesses the tactical situation and verifies: [FM 101-5, App C; FM 6-20, pp. 3-3 thru 3-6]

a) Fire support.

(1) Ability to support brigade forces in contact.

(a) HPTs are still valid.

(b) Brigade collection assets are capable of tracking HPTs to decision points.

(c) Radar cueing schedule and zones are providing the necessary targets to win the counterfire battle.

(d) Sufficient fire support is available to the Bn TF commanders to provide freedom of maneuver.

(2) Ability to support the plan.

(a) Ensures that fire plans have been adjusted by the brigade/Bn TF FSOs based on new enemy and terrain information.

(b) Fire plans have been refined and modified by the brigade FSO to ensure that fires are massed as designated by the brigade commander.

(c) Direct and indirect fire plans are synchronized and integrated with all other combat multipliers, including physical tie-in between Bn TF units and units to flanks.

(d) Fire support priorities adequately weight the brigade main effort.

(e) Target acquisition assets are providing timely data.

(f) Fire support units are positioned and prepared to continue support for the operation, or that they can move in time.

(3) Synchronization of fire support.

(a) Direct and indirect fire coordination measures have been disseminated, confirmed by, and implemented by DS FA battalion subordinate commanders.

(b) Target lists continue to be refined by the brigade FSO and Bn TF FSOs and are synchronized with changes to the brigade or Bn TF schemes of maneuver.

b) Mobility and survivability.

(1) Obstacles are in place or are projected to be.

(2) Obstacles are observed and covered by fires.

(3) Modifications based on new information to FASCAM employment plans have been made by the brigade engineer, ABE, and brigade FSO.

c) CSS.

(1) CSS priorities are adjusted based on new information.

(2) Supplies are adequate to support the operation and are being delivered to DS FA battalion units on time.

(3) There are sufficient transportation assets available and operational to support the operation.

(4) The status of personnel fill enable DS FA battalion units to accomplish their missions and tasks.

(5) The state of morale in the DS FA battalion continues to be high.

(6) The current and projected state of maintenance of equipment in the DS FA battalion meets mission requirements.

(7) Medical personnel, supplies, and equipment are available and positioned to support the operation.

(8) Tube strength remains adequate to provide fire support for the current operation and on-order missions.

(9) The ALOC is positioned to provide timely logistic support to the batteries.

(10) Ammunition levels in the batteries are adequate to support the fire plan, targets of opportunity, and high volume fires such as FASCAM.

d) Command and control.

(1) Key digital and communications links within the DS FA battalion remain operational.

(2) Current and projected locations of DS FA battalion CPs provide for continuous command and control.

b. The DS FA battalion commander projects the outcome of the current battle based on his evaluation of the current plan and the status of the fire support system. [FM 101-5, pp. 1-11 thru 1-17, 4-48]

1) Activities of the DS FA battalion are assessed to ensure that the DS FA battalion is executing the brigade fire support plan. [FM 6-20-40, pp. 2-18; FM 6-20-50, p. 2-18]

2) FA target acquisition radars and systems operations are assessed to ensure that they are adhering to priorities for observation. [ARTEP 6-115-MTP, 06-2-01-2513/1]

a) Radars and systems are positioned as directed. [ARTEP 6-115-MTP, 06-2-01-2513/1]

b) Searches are being executed in directed sectors. [ARTEP 6-115-MTP, 06-2-01-2513/1]

c) Coverage of the brigade AO is being achieved as directed. [ARTEP 6-115-MTP, 06-2-01-2513/1]

d) Brigade radar zones are integrated with division radar zones to ensure no gaps in coverage exist. [ARTEP 6-115-MTP, 06-2-01-2513/1]

3) The DS FA battalion commander projects the outcome of the current battle to determine the collection plans capability to acquire and track brigade HPTs and other targets based on the situation. [FM 6-20-10, pp. 1-10, 2-11]

4) The DS FA battalion commander projects the outcome of the current battle to determine the need for additional fire support or target acquisition systems to achieve the required endstate for the current mission. [AN]

5) The DS FA battalion commander identifies additional fire support attack systems (e.g., FA, CAS, naval surface fires, nonlethal) required to execute the brigade fire support plan. [FM 6-20-40, pp. 2-5; FM 6-20-50, pp. 2-5]

6) The DS FA battalion commander identifies additional target acquisition and collection systems required to execute the fire support plan. [FM 6-20-40, pp. 2-5; FM 6-20-50, p. 2-5]

7) The DS FA battalion commander identifies alternatives and options for changing the current distribution and missions of existing brigade target acquisition and attack systems assets to allow the brigade fire support plan to be executed. [FM 6-20-40, p. 2-5; FM 6-20-50, p. 2-5]

c. The DS FA battalion commander anticipates future requirements and actions (sequels) based on his projection of the outcome of the current battle. [FM 101-5, pp. 1-15, 4-46, App C]

1) The DS FA battalion staff assists the DS FA battalion commander in his assessment of future requirements by providing information. [AN]

2) Mission.

a) The brigade and division commanders' intents are continuously reviewed for probable mission changes.

b) Friendly capabilities and templated/anticipated enemy capabilities are compared to determine if directed and projected endstates can be achieved as planned.

c) Branches, sequels, and alternative COAs for the current mission are reviewed to determine the need for modification based on available information.

d) Risk criteria are reassessed.

e) On-order missions are reviewed.

f) Necessary changes to the planned role and employment of fire support assets are determined.

g) Impact of changes to the brigade fire support plan on the FASP.

3) Enemy.

a) Satisfied PIR, IR, and other intelligence information are reviewed for deviations from the original templated enemy action.

b) Enemy's mission and intent are not as anticipated.

c) Confirmed enemy strength and dispositions are not the same as initially templated.

d) Updated SIT TEMP and event templates are assessed to determine the DS FA battalion's ability to achieve future contingencies.

d) The DS FA battalion commander may adjust PIR and IR.

e) The DS FA battalion commander decides whether there is a need to recommend changes to the designation of NAIs, TAIs, and HPTs.

4) Troops.

a) Future mission capability of subordinate units is projected.

(1) Combat power, current and projected, required to achieve new or previously unidentified tasks.

(2) Projected equipment and personnel status.

(3) Ability to move and maneuver based on changes to terrain factors.

(4) Capability to range critical targets and mass fires as required to meet new conditions or missions.

b) Impact of other units' plans on DS FA battalion plans.

c) Adequacy of future logistics support areas and MSR/ASRs is determined.

d) Adequacy of supplies to meet new requirements is determined.

e) The DS FA battalion commander reviews and updates FFIR as needed.

5) Terrain.

a) Impact of terrain factors in and around the proposed firing positions.

b) Impact of projected weather on terrain factors.

c) Impact of terrain on choice of munitions.

6) Time.

a) Projections of time available versus time required to meet new mission requirements.

b) Changes to mission time-lines necessitated by enemy activities or changes to DS FA battalion or elements' missions.

d. The DS FA battalion commander decides whether the plan needs to be changed. [FM 101-5, pp. 4-48]

1) The DS FA battalion commander decides the current plan meets the assessed situation and continues to monitor and direct DS FA battalion fires. [FM 101-5, p. 4-48]

2) The DS FA battalion commander decides the plan must be modified. [FM 101-5, p. 4-48]

a) The situation is such that the current fire support plan and FASP no longer support forces in contact or support the maneuver plan.

b) Changes to the brigade plan require that the fire support plan and FASP be modified.

3) The DS FA battalion commander decides to initiate a FRAGO; considers (see task 4 for description of how to develop and issue this FRAGO): [FM 101-5, pp. 1-14 thru 1-16]

a) Whether COAs previously developed can be modified and developed as the new plan.

b) Time available to develop, coordinate, and implement a new plan.

c) Subordinate units' time to complete new preparation requirements under the new plan and task organization.

d) The DS FA battalion staff's ability to continue to monitor and direct current DS FA battalion activities while meeting new planning requirements.

4) The DS FA battalion commander assesses the impact of new FRAGOs from brigade.

a) Time required to plan and prepare for new mission based on current mission time-lines.

b) Ability of the DS FA battalion to respond to the new situation based on the level of mission preparedness.

(1) Fire units available to respond without impacting the DS FA battalion's ability to perform the current mission.

(2) Availability of CSS and supplies to support the new situation without impacting on support necessary for the current mission.

c) Capability of the DS FA battalion staff to dedicate time and effort to plan and coordinate new missions; impact of diverting key staff members from monitoring execution of the current mission to planning for a new mission.

5) The DS FA battalion commander determines how to modify the military decision-making process (MDMP) based on complexity, potential for confusion on the battlefield, and time available. [FM 101-5, Chap 4]

a) The DS FA battalion commander determines staff availability, the magnitude of change to the plan, and the amount of time available before execution.

b) The DS FA battalion commander decides where to conduct the decision-making process and actions required to produce and disseminate the FRAGO.

4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Section IV; ARTEP 6-115-20-MTP, Task 06-2-02-1000, 06-3-02-1100, 1130-1190, 1300, 1390, Battle Command, p. 12; FM 6-20-40, Chap 1, 2; FM 101-5, Chap 2, 4]

b. The DS FA battalion commander conducts the MDMP in a time-constrained environment, if required. [FM 101-5, pp. 4-41 thru 4-60]

1) When planning changes to current orders or planning for a new mission during the execution phase of the current battle, the DS FA battalion commander must:

a) Consider using products developed during the MDMP for the current mission as reference points from which modifications are made to predetermined branches and sequels. Products include:

(1) Weather analysis.

(2) Terrain analysis.

(3) Enemy OB and updated IPB products.

(4) Current updated staff estimates.

(a) DS FA battalion capabilities.

(b) Constraints.

(5) PIR, EEFI, and FFIR requested by the DS FA battalion commander.

b) The DS FA battalion commander and staff simultaneously monitor, plan, and direct all aspects of DS FA battalion operations (e.g., support of the counter-reconnaissance battle, support of the current mission, changes to the current plan, and the next mission being formulated).

c) The DS FA battalion commander and staff monitor the pace of the battle so as to make changes in a timely manner, and if appropriate, plan for a future mission.

d) Recognize the similarities and/or differences between the initial plan and new requirements.

e) Assess the friendly force posture, enemy probable actions, and battlespace.

f) The DS FA battalion commander and staff anticipate the outcome of the current fight to begin considering future requirements and actions.

2) The DS FA battalion commander reviews his estimate.

a) Mission: identifies specified and implied tasks which his DS FA battalion must accomplish.

b) Enemy: the DS FA battalion commander identifies:

(1) A single or limited number of enemy COA which the DS FA battalion must defeat.

(2) Enemy strength, location, disposition, activity, equipment, and capabilities.

c) Terrain and weather: the DS FA battalion commander identifies relevant or specific aspects of soil type, hydrology, climatic conditions, and visibility.

d) Troops: the DS FA battalion commander analyzes the DS FA battalion's combat power in terms of capability relative to what he believes necessary to accomplish the mission.

(1) Capabilities, strengths, and weaknesses of subordinate commanders and units.

(2) Weapon systems and equipment.

(3) Disposition.

(4) Supplies.

(5) Troop rest and morale.

e) Time: The DS FA battalion commander determines the time available for planning, preparing, and executing the operation for both enemy and friendly forces.

3) The DS FA battalion commander and S3 conduct a quick mission analysis; they consider: [FM 101-5, p. 4-48]

a) The current situation and information.

b) The brigade and division commanders' intents and desired endstates.

c) Whether the DS FA battalion has the assets and resources to execute the new mission.

d) The changes to the fire support plan that determine the need to change the FASP.

e) The DS FA battalion commander may request information from the staff to support his COA development.

(1) BOS specific information from selected staff members.

(2) Information available in products developed during the initial mission MDMP.

4) The DS FA battalion staff assists the DS FA battalion commander in developing COA, if situation permits. [FM 101-5, p. 4-51]

a) Uses products and analyses developed during the initial mission MDMP to define branches and sequels for consideration.

b) Provides recommendations to modify existing branches and sequels to meet new requirements.

c) Provides recommendations on developing new branches and sequels based on new requirements.

5) The DS FA battalion commander selects a COA and describes his revised concept to his staff. [FM 101-5, p. 4-49]

a) Typically, one enemy and one friendly COA are assessed due to the time constraints which limits and streamlines the decision-making process.

b) The DS FA battalion commander explicitly expresses COA concepts:

(1) Intent and desired endstate.

(2) Concept of operations.

(a) Major components of movement plan (centralized or decentralized control).

(b) Integration of combat multipliers.

(c) Critical HPTs and center of gravity.

(3) Enemy COA(s) to be considered.

(4) CCIR.

(5) Limitations.

(6) Risks.

c) The DS FA battalion commander provides the concept and guidance to the staff for detailed COA development and mission analysis.

d) If time is available, the DS FA battalion staff conducts mission analysis and:

(1) Develops details on the COA provided by the DS FA battalion commander.

(2) Develops branches and sequels to the selected COA which adhere to the DS FA battalion commander's guidance.

6) The DS FA battalion commander performs a suitability-feasibility-acceptability analysis of the new plan. The DS FA battalion commander performs the analysis by himself or with staff assistance. [FM 101-5, p. 4-51]

a) Suitability factors:

(1) New concept accomplishes the DS FA battalion mission.

(2) New concept meets the brigade and division commanders' intents.

(3) The plan accomplishes his intent for the DS FA battalion's endstate.

b) Feasibility factors:

(1) Sufficient time to execute the plan as designed.

(a) Duration of events.

(b) Time and distance factors for maneuver and fires.

(2) Sufficient ground and air space to accomplish the plan as designed.

(a) Roads and terrain support the plan.

(b) Depth of action

(3) The means to execute the plan as designed are available.

(a) DS FA battalion combat power vs. the enemy (force ratios).

(b) Required ammunition available to support the plan (e.g., smoke, FASCAM).

(4) Impact of on-going preparation activities.

(5) Impact on subordinate units and combat multipliers.

(6) Requirements to alter task organization.

c) Acceptability:

(1) Mission success is not at significant risk of failure.

(2) Hazards to soldiers, equipment and supplies are within acceptable limits.

7) The DS FA battalion commander quickly compares COAs (if more than one).

8) The DS FA battalion commander selects a COA and announces his decision to key DS FA battalion staff members.

9) The DS FA battalion commander conducts mission risk assessment to ensure that conditions most likely to cause mission failure and accidents (including fratricide) have been mitigated.

a) DS FA battalion units have been tasked within their capabilities.

b) Procedural and positive risk-reduction control measures have been implemented, for example:

(1) Emphasizes situational awareness.

(2) Emphasizes positive target identification.

(3) TSOPs are consistent with doctrine and are adhered to.

(4) Doctrinally correct terminology is applied to all control measures (e.g., fire support coordination lines [FSCLs], and restrictive fire lines [RFLs]).

(5) ROE are clear.

10) The DS FA battalion commander reviews his current CCIR to determine: [FM 101-5, pp. 4-47/48]

a) Validity of CCIR.

b) New CCIR required to provide the DS FA battalion commander with the information needed to make decisions about the plan.

11) The DS FA battalion commander directs preparation of FRAGOs. [FM 101-5, App H;]

a) The DS FA battalion S3 manages and supervises internal and external coordination by the staff to synchronize plan refinements.

b) The staff takes prompt action to accomplish the guidance given by the DS FA battalion commander.

(1) Publishes refinements to orders and planning and execution products such as DST, synchronization matrix, FSEM.

(2) Initiates requests to DIVARTY for additional support.

c) The DS FA battalion staff at the DS FA battalion TOC refines plans, facilitates planning for future operations, identifies and corrects problems identified during subordinate unit execution, and coordinates additional support from DIVARTY.

d) The DS FA battalion staff develops FRAGOs reflecting changes to the initial plan for the DS FA battalion commander's approval: [FM 101-5, App H]

(1) Graphics and control measures for the operation.

(2) DST and synchronization matrix from the brigade FRAGO.

(3) Fire support plan, FSEM, FSCM.

(4) Communications plan.

(5) CSS plan.

12) The DS FA battalion commander approves FRAGOs and directs members of his staff to issue FRAGOs based on his approval or in compliance with his guidance. [FM 101-5, p. 4-49]

Outcome 5

Affected units and personnel receive relevant direction, changes, and refinements to the plan in time to perform troop leading procedures and execute coordinated and synchronized actions.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

a. The DS FA battalion commander directs subordinate forces.

2) The DS FA battalion commander positions himself on the battlefield where he can best fulfill both his responsibilities as the FSCOORD to the brigade commander and as the DS FA battalion commander.

a) As the brigade FSCOORD, positions himself where he can best influence the battle and assist the brigade commander in integrating and coordinating indirect fire support.

(1) With the brigade commander.

(2) In the FSE.

b) As the DS FA battalion commander, when required, is in the DS FA battalion area to best exercise his commander duties.

c) Delegates specific duties to his XO and S3 to provide for freedom of movement to execute his duty as brigade FSCOORD.

b. The DS FA battalion commander ensures that each battlefield operating system (BOS) is integrated and coordinated with other BOS during delivery of fires and execution of battle. [FM 101-5, pp. H-36 - H-42]

1) The DS FA battalion commander integrates intelligence requirements with the other BOS.

c) The DS FA battalion commander manages the detection effort to acquire and engage HPTs.

(1) Verifies that means are available to detect and track HPTs.

(2) Ensures that responsibility for the attack of critical HPTs has been assigned and that the responsible agency is prepared to execute with the assigned trigger.

(3) Confirms a backup attack system for each critical HPT.

(4) Verifies that assessment assets linked to critical HPTs are available as needed.

(5) Informs assessment asset managers as HPT refinements or attack times and measures change.

(6) Verifies that target intelligence from assessment is incorporated into overall enemy situational development.

2) The DS FA battalion commander integrates and coordinates fire support with maneuver.

3) The DS FA battalion commander integrates and coordinates fire support with the other BOS.

a) The FA support plan (FASP) is coordinated with the brigade fire support plan.

(2) Last minute modifications to the plan must be approved by the brigade commander through the FSCOORD.

4) The DS FA Cdr integrates and coordinates mobility/countermobility/ survivability with the other BOS.

5) The DS FA battalion commander integrates and coordinates air defense with the other BOS.

6) The DS FA battalion commander integrates and coordinates CSS with the other BOS.

a) Verifies that CSS assets are positioned and are providing planned supply, medical, and maintenance support to the DS FA battalion during the mission, without interfering with the DS FA battalion delivery of fires.

b) Verifies that push packages of emergency resupplies are configured and ready.

c) Reviews designated MSR and ASRs to ensure that CSS assets continue to provide timely response.

d) Verifies that medical assets and operations are supporting the DS FA battalion.

e) Ensures that vehicles and equipment are being recovered, repaired, and returned to the user or delivered to higher maintenance echelons.

f) Verifies maintenance assets are task organized and are providing support.

7) The DS FA battalion commander integrates and coordinates command and control with the other BOS.

a) The DS FA battalion commander monitors the DST, synchronization matrix, AGM, and FSEM to ensure that:

(1) Modifications to the brigade plan and fire support plan are integrated.

(2) Mission details to achieve the brigade commander's intent are adequately reflected.

(3) Fire support is massed:

(a) Against the enemy.

(b) At the decisive point and time as visualized by the brigade commander.

b) Command and control measures are reviewed by the DS FA battalion commander, staff, and subordinate leaders to ensure that changes in the tactical situation are incorporated into all DS FA battalion documents; at minimum:

(1) Maneuver graphics and control measures (e.g., phase lines, objectives, routes, check and coordination points).

(2) Signals and quick execution code words.

(3) DST.

(4) Synchronization matrix.

(5) FSEM and FSCM.

c) CPs and staff continue to support the mission.

(1) Receive, process, and disseminate information.

(3) Coordinate and integrate combat multipliers.

c. The DS FA battalion commander maintains unit cohesion and discipline during the execution of the battle by: [Battle Command, Leadership and Decision Making, p. 11-15, FM 22-100, Chap 4, 5, 6]

1) Checking to ensure that orders are executed and reinforcing discipline by demanding compliance to standards and his guidance.

3) Displaying a calm presence to subordinates while clearly delineating guidance and providing precise, simple orders and instructions.

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7, App D, ARTEP 6-115-20-MTP, Task 06-1-02-1000, 06-2-02-1000, 06-3-02-1100, 1300, 1500, 1600, 06-1-02-1700; FM 6-20-30, Chap 2, App J; FM 101-5, Chap 3, Appendices F, J]

a. The DS FA battalion commander updates his estimate based on his assessment of the current situation and new information: [FM 100-5, pp. 2-14, 15; FM 101-5, pp. 1-4 thru 1-11, 3-85, Chap 4 and App C; FM 71-3, p. 3-2; Battle Command, Leadership and Decision Making]

6) The DS FA battalion commander assesses the tactical situation and verifies: [FM 101-5, App C; FM 6-20, pp. 3-3 thru 3-6]

a) Fire support.

(3) Synchronization of fire support.

(b) Target lists continue to be refined by the brigade FSO and Bn TF FSOs and are synchronized with changes to the brigade or Bn TF schemes of maneuver.

d. The DS FA battalion commander decides whether the plan needs to be changed. [FM 101-5, pp. 4-48]

5) The DS FA battalion commander determines how to modify the military decision-making process (MDMP) based on complexity, potential for confusion on the battlefield, and time available. [FM 101-5, Chap 4]

4. **The direct support field artillery battalion commander directs changes to the operation or plan**. [TRADOC Pam 11-9, Section IV; ARTEP 6-115-20-MTP, Task 06-2-02-1000, 06-3-02-1100, 1130-1190, 1300, 1390, Battle Command, p. 12; FM 6-20-40, Chap 1, 2; FM 101-5, Chap 2, 4]

a. The DS FA battalion commander and/or staff issue WARNOs to alert DS FA battalion staff members and subordinate DS FA battalion elements that the plan will be changed. WARNOs may include: [FM 101-5, p. 4-55]

1) The enemy situation, events, and the mission, task, or operation.

2) The brigade and division missions.

3) The brigade and division commanders' intents.

4) The DS FA battalion commander's intent statement.

5) The earliest time of movement or degree of notice the DS FA battalion commander gives to the main body.

6) Orders for advanced parties, reconnaissance parties, and azimuth of fire.

7) Service support instructions, special equipment necessary, regrouping of transportation, or preliminary moves to assembly areas.

8) The rendezvous point or time for assembly of an orders group; whether commanders or representatives are to attend; time needed for issuing written orders.

b. The DS FA battalion commander conducts the MDMP in a time-constrained environment, if required. [FM 101-5, pp. 4-41 thru 4-60]

11) The DS FA battalion commander directs preparation of FRAGOs. [FM 101-5, App H;]

a) The DS FA battalion S3 manages and supervises internal and external coordination by the staff to synchronize plan refinements.

b) The staff takes prompt action to accomplish the guidance given by the DS FA battalion commander.

(1) Publishes refinements to orders and planning and execution products such as DST, synchronization matrix, FSEM.

(2) Initiates requests to DIVARTY for additional support.

c) The DS FA battalion staff at the DS FA battalion TOC refines plans, facilitates planning for future operations, identifies and corrects problems identified during subordinate unit execution, and coordinates additional support from DIVARTY.

d) The DS FA battalion staff develops FRAGOs reflecting changes to the initial plan for the DS FA battalion commander's approval: [FM 101-5, App H]

(1) Graphics and control measures for the operation.

(2) DST and synchronization matrix from the brigade FRAGO.

(3) Fire support plan, FSEM, FSCM.

(4) Communications plan.

(5) CSS plan.

12) The DS FA battalion commander approves FRAGOs and directs members of his staff to issue FRAGOs based on his approval or in compliance with his guidance. [FM 101-5, p. 4-49]

13) The DS FA battalion S3 issues complete FRAGOs which contain: [FM 101-5, App H]

a) Allocation of all FA assets.

b) Projected changes to the allocation of FA assets based on tactical contingencies in the brigade OPORD (on-order missions).

c) The DS FA battalion commander's concept of the operation.

d) Requirements for positioning and movement of firing units to support the fire support plan. (FASP may or may not be written).

e) The CSR for ammunition, if any.

f) Arrangements for command and control if they differ from unit DS FA battalion TSOPs.

g) Specific instructions for attached target acquisition assets, survey, and met.

h) Specific instructions for CSS, if different from normal unit SOPs.

i) Restrictions on ammunition expenditures, types of fires, and limiting risk to friendly troops.

j) Current and on-order FSCM.

k) The target list developed by the brigade.

l) Schedules for preplanned fires.

m) Special instructions on ROE, fire support communications, and logistic support.

n) Locations of DS FA battalion CPs, ASPs, and ATPs.

o) NBC coordinating instructions.

c. The DS FA battalion staff coordinates internally and with higher, adjacent, and supporting elements to coordinate the FRAGO. [FM 101-5, App B]

1) The DS FA battalion staff must inform DS FA battalion elements of outdated/preempted orders, execution products, and annexes containing information that has been superseded by the current FRAGO.

2) The DS FA battalion S3, at the TOC, must analyze the current FRAGO in light of current brigade, adjacent, and supporting unit OPORDs to preclude conflict.

3) The DS FA battalion S3 supervises the staff actions necessary to assist the brigade commander to synchronize the current battle.

5) LNOs communicate the FRAGO and the DS FA battalion commander's intent to their respective headquarters.

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.** [FM 6-20-1, Chap 7; FM 6-20, pp. 3-5 thru 3-6]

a. The DS FA battalion commander initiates the decision-making process for the next mission in order to rapidly transition from the current operation to the next and directs planning to protect the force during the brigade consolidation and reorganization. He directs the batteries to ensure that:

1) Fire support systems are mobile and correctly emplaced.

2) Components of the fire support system are protected from enemy action ranging from terrorist attack and by-passed enemy forces to indirect fires supporting counter-attacking force.

b. The brigade commander directs development of a fire support plan that covers the entire unit sector and fills any gaps among adjacent units. (Quick fire planning technique may be required; see Brigade BF 15.) Fires must be planned to:

1) Protect reorganizing troops.

2) Break up counter-attacks.

3) Prevent enemy reinforcement, disengagement, or resupply.

c. The DS FA battalion commander directs the DS FA battalion S3/XO to plan for the hasty reorganization of fire support units. (Deliberate reorganization or reconstitution is not a DS FA battalion commander's prerogative.)

d. The DS FA battalion commander directs the staff to assist in providing support for the brigade during the brigade consolidation. The DS FA battalion coordinating and special staff accomplish the following: [FM 101-5, Chap 4; Battle Command Techniques and Procedures, Chap 2, 3; FM 71-3, App H]

1) The DS FA battalion XO:

b) Directs and supervises the refurbishment of DS FA battalion units in preparation of the next mission.

2) The DS FA battalion S2:

b) Assists in the preparation of DS FA battalion OPORD and/or FRAGOs.

3) The DS FA battalion S3:

c) Supervises the staff preparation of orders for follow on missions. Prepares the DS FA battalion order or FRAGO for the next mission based upon the DS FA battalion commander's guidance.

e) Focuses upon synchronizing the fires in support of the brigade reorganization and consolidation.

f) Ensures that the DS FA battalion XO is aware of the DS FA battalion commander's guidance, intent, and desired endstate for upcoming engagements.

g) Together with the DS FA battalion S2 and brigade FSO, revises the fire support plan to support continuing operations

4) The DS FA battalion S4, together with the DS FA battalion XO and FSB commander, regenerates the DS FA battalion's combat power by providing support well forward and addressing:

a) The number and type of support units and resources available.

b) The DS FA battalion commander's priorities.

c) Relevant consumption factors.

d) The provision of necessary transportation to batteries to accomplish DS FA battalion directed tasks during continuation of the mission.

e) Critical weapons systems.

f) The threat to CSS units in general and those moving into the forward battle areas in particular.

g) Contingency plans if selected lines of communication (LOCs) are impassable, if the enemy situation in the brigade AO changes, or stocks on hand do not meet requirements.

5) The DS FA battalion S1 addresses:

a) Allocation of replacement personnel presently in the BSA to batteries based upon the DS FA battalion commander's direction or recommendation of the DS FA battalion S3 or XO.

b) Replacement of key leaders lost during previous operations.

c) Fill of leadership positions down to platoon level.

d) Refugee control issues.

e) Information on noncombatant activity in the brigade AO and other local population situations.

e. The DS FA battalion commander directs the staff to provide technical support to the batteries.

1) The DS FA battalion commander ensures that alternate command and control facilities are available.

2) The DS FA battalion commander ensures that the technical aspects of fire support (meteorology, survey and digital, automated fire control, and communications) are accurate and rapid.

Outcome 6

Subordinate leaders demonstrate an understanding of the critical elements of their own mission, and mission essential tasks, the DS FA Bn mission, and the Bn Cdr's intent.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

a. The DS FA battalion commander directs subordinate forces.

1) The DS FA battalion commander takes actions to ensure that subordinate leaders have a clear understanding of his intent and concept. Actions include: [FM 101-5, Chap 1, 4, App B, D, H, J; Battle Command Techniques and Procedures, (April 21, 1995), Chap 2, 4; Battle Command, pp. 10-32]

a) Meeting with subordinate commanders and leaders to receive information and issue directions.

b) Evaluating reports from subordinates for understanding of his intent, concept of operations, and their missions.

c. The DS FA battalion commander maintains unit cohesion and discipline during the execution of the battle by: [Battle Command, Leadership and Decision Making, p. 11-15, FM 22-100, Chap 4, 5, 6]

1) Checking to ensure that orders are executed and reinforcing discipline by demanding compliance to standards and his guidance.

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.** [TRADOC Pam 11-9, Section IV; Battle Command, pp. 43 and 65; ARTEP 6-115-20-MTP; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]

   b. The DS FA battalion CPs evaluate acquired information, update products, and maintain status related to integrating and coordinating fire support for the brigade. [FM 6-20-1 p. 3-1; FM 101-5, Chap 6; ARTEP 6-115-MTP, Task 06-1-02-2500]

      10) The DS FA battalion CPs maintain status. [FM 6-20-1, pp. 3-1 thru 3-6]

         a) DS FA battalion TOC maintains status. [FM 6-20-1, pp. 3-1 thru 3-6]

         b) The DS FA battalion ALOC maintains status. [FM 6-20-1, Chap 7]

         c) The DS FA BSOC maintains status.

3. **The direct support field artillery battalion commander visualizes the battlefield.** [TRADOC Pam 11-9, Chap 7, App D, ARTEP 6-115-20-MTP, Task 06-1-02-1000, 06-2-02-1000, 06-3-02-1100, 1300, 1500, 1600, 06-1-02-1700; FM 6-20-30, Chap 2, App J; FM 101-5, Chap 3, Appendices F, J]

   a. The DS FA battalion commander updates his estimate based on his assessment of the current situation and new information: [FM 100-5, pp. 2-14, 15; FM 101-5, pp. 1-4 thru 1-11, 3-85, Chap 4 and App C; FM 71-3, p. 3-2; Battle Command, Leadership and Decision Making]

      3) Identifies changes to friendly ("Troops") situation:

         o) Subordinate unit delivery of fires, which include:

            (1) Battery commanders' understanding of and actions to achieve the brigade commander's intent and fire support guidance.

4. **The direct support field artillery battalion commander directs changes to the operation or plan.** [TRADOC Pam 11-9, Section IV; ARTEP 6-115-20-MTP, Task 06-2-02-1000, 06-3-02-1100, 1130-1190, 1300, 1390, Battle Command, p. 12; FM 6-20-40, Chap 1, 2; FM 101-5, Chap 2, 4]

   c. The DS FA battalion staff coordinates internally and with higher, adjacent, and supporting elements to synchronize the FRAGO. [FM 101-5, App B]

4) The DS FA battalion staff understands the DS FA battalion commander's visualization of synchronization requirements and performs coordination necessary to synchronize the FRAGO.

Outcome 7

Soldiers are motivated, disciplined, and maintain unit cohesion during the battle.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

   c. The DS FA battalion commander maintains unit cohesion and discipline during the execution of the battle by: [Battle Command, Leadership and Decision Making, p. 11-15, FM 22-100, Chap 4, 5, 6]

      1) Checking to ensure that orders are executed and reinforcing discipline by demanding compliance to standards and his guidance.

      2) Observing subordinates:

         a) For indicators of shortfalls in performance or manner of performance; takes corrective action as necessary.

         b) For noteworthy performance that he can praise and recognize.

      3) Displaying a calm presence to subordinates while clearly delineating guidance and providing precise, simple orders and instructions.

      4) Maintaining a moral presence through ethical decision-making and personal example.

      5) Monitoring subordinates and himself for degradation of mental and physical capability. [Battle Command, Leadership and Decision Making, pp. 27, 28]

         a) The DS FA battalion commander monitors his own physical and mental state and gets rest.

         b) The DS FA battalion XO monitors the DS FA battalion commander's and staff members' physical and mental state and recommends rest periods.

c) The DS FA battalion commander ensures that battery commanders and DS FA battalion staff get necessary rest and are prepared for battle.

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.** [TRADOC Pam 11-9, Section IV; Battle Command, pp. 43 and 65; ARTEP 6-115-20-MTP; FM 34-130, Chap 2; FM 6-20-40, Chap 2; FM 101-5, Chap 3, 5, App J]

a. The DS FA battalion CPs acquire information to assist the DS FA battalion commander. [TRADOC Pam 11-9, Chap 7 and App D]

12) The DS FA battalion S1 section obtains information related to integrating and coordinating support for the brigade: [ARTEP 6-115-MTP, Task 12-1-C404; FM 101-5, p. C-5; FM 6-20-1, pp. 7-7, 7-21, 7-22]

c) Personnel information from DIVARTY S1 and division adjutant general.

(1) Availability of replacements and replacement operations. (including weapons system replacement operations [WSRO]).

(2) Postal services.

(3) Morale, welfare, and recreation (MWR) support.

d) Morale and discipline indicators from DS FA battalion special staff officers and battery commanders.

(1) Battery reports of stragglers, AWOLs, and absences from place of duty.

(2) Sick call and stress casualties from the DS FA battalion surgeon.

(3) Advice from the CSM on the state of morale and discipline.

c. DS FA battalion CPs and staff communicate information [FM 6-20-1, pp. 3-1 thru 3-3; FM 101-5, Chap 5]

11) The DS FA battalion CSS staff performs coordination with the FSB and supporting CSS headquarters: [FM 6-20-1, pp. 7-8-10]

e) The DS FA battalion S1 processes awards, decorations, promotions, and legal actions of DS FA battalion personnel.

h) The DS FA battalion S1 tracks evacuation of personnel and casualties.

Outcome 8

The DS FA Bn command, control, communications, and intelligence (C3I) capability survives and is prepared for the next mission.

Task Elements

1. **The direct support field artillery battalion commander directs and leads subordinate forces.** [TRADOC Pam 11-9, Chap 7 and App D]

a. The DS FA battalion commander directs subordinate forces.

2) The DS FA battalion commander positions himself on the battlefield where he can best fulfill both his responsibilities as the FSCOORD to the brigade commander and as the DS FA battalion commander.

b) As the DS FA battalion commander, when required is in the DS FA battalion area to best exercise his commander duties.

c) Delegates specific duties to his XO and S3 to provide for freedom of movement to execute his duty as brigade FSCOORD.

5. **The direct support field artillery battalion command posts manage and maintain command, control, and communications.**

a. DS FA battalion CPs manage means of communicating information. [FM 101-5, Chap 6, App B, L; ARTEP 6-115-MTP, Task 06-3-01-2150, 2160, 2120]

6) Trains CPs (ALOC/BSOC).

a) DS FA battalion XO is the second in command of the battalion. He is the senior staff officer of the unit and serves as the primary logistician. [FM 6-20-1, p. 3-4]

(1) Supervises the activities of the CSS staff.

(3) Makes face-to-face contact with his counterparts on the brigade, DIVARTY, and FSB staff and ensures that the DS FA battalion is supported with a minimum of confusion or lost effort.

b) The ALOC positions during mission execution to conduct rapid movement of emergency CL III and V forward to support the DS FA battalion. [FM 6-20-1, p. 7-8]

(2) Rapidly assumes the functions of the TOC if required.

c) The DS FA battalion S4, assisted by the PSNCO, supervises ALOC operations. [FM 6-20-1, p. 7-5; FM 6-20-40, p. F- 4]

(2) Monitors the tactical situation and maintains communications to ensure that ALOC is prepared to assume duties of the DS FA battalion TOC if needed.

b. The DS FA battalion CPs maintain command, control, and communications (C3) throughout the battle. [FM 6-20-40, p. 26; FM 6-20-50, App C; FM 101-5, Chap 5 and 6, App A, B, L]

1) Positioning is such that the DS FA battalion commander maintains communications with brigade, DIVARTY, reinforcing battalion, and subordinate units to provide continuous fire support to the force during the battle and the consolidation and reorganization phase. [FM 6-20-1, p. 3-25]

a) The DS FA battalion commander exercises command and control during mission execution.

b) DS FA battalion, battery, and platoon CPs displace, as required, during mission execution to provide the most responsive fire support during the battle.

2) The DS FA battalion CPs take action to survive: [FM 6-20-1, p. 3-25]

a) DS FA battalion staff ensures that CPs are not detected by the enemy by using passive defense measures.

b) The DS FA battalion CPs use cover, concealment, and routes which reduce detection by the enemy.

c) Local security is structured to provide early warning, perimeter protection, and a reaction force for immediate response.

d) OPSEC is continually monitored.

3) Communications are maintained without interruption with all subordinate elements and brigade to allow the DS FA battalion commander and staff to exercise command and control. [FM 6-20-1, p. 3-26]

c. The DS FA battalion re-establishes C3 operations in the event of the loss or destruction of the TOC. [FM 101-5, Chap 5, App B, Battle Command Techniques and Procedures, Chap 4]

1) In the event of a catastrophic loss of communications, C3 for the DS FA battalion is assumed per the DS FA battalion TSOP or plan. Continuity of operations for the DS FA battalion is a function of the automated fire control present in the battalion.

a) Tactical fire direction system (TACFIRE).

(1) Control assumed by reinforcing battalion TOC in mutual support unit role. (First priority).

(2) Control assumed by a pre-designated battery. (Second priority for degraded operations).

b) IFSAS/light TACFIRE.

(1) In the event of a loss of the dual station FDC, mutual support can be assumed by any pre-designated single station briefcase terminal/lap-top computer unit. Priorities for continuity of operations:

(a) DS FA battalion O&I.

(b) The brigade FSE.

(c) Reinforcing battalion.

(d) Autonomous operations.

(2) Activation of mutual support requires proper system initialization and command authorization.

c) AFATDS.

(1) AFATDS software and distributed architecture provide internodal (within an operational facility [OPFAC]) and intranodal (external OPFAC) continuity of operations.

(2) Continuity of operations is a battle drill necessary for any operation.

(3) Listed below are the primary backup units for the divisional AFATDS nodes. Secondary back up units may be established based on the DS FA battalion TSOP.

Principal	**Primary Back Up**	**Secondary Back Up**
Division Main FSE	Division TAC FSE	Division Artillery O&I
Division TAC FSE	Division Main FSE	Division Artillery O&I
Division Artillery	Reinforcing Bde	
Bde FSE	Bde TAC	DS Bn FDC
DS Bn FDC	DS Bn O&I	Reinf Bn FDC or Bde FSE
DS Artillery Bn CP	Reinf FA battalion	Bde FSE

d. Succession of command is implemented as per the DS FA battalion TSOP.

1) The DS FA battalion XO, as second in command of the DS FA battalion:

a) As soon as it is confirmed that the DS FA battalion commander is killed, captured, or evacuated from the brigade AO, the DS FA battalion XO assumes command of the battalion.

b) Notifies the DIVARTY commander and brigade commander.

c) Informs subordinate units that he has assumed command until further notice.

(1) If operating as the senior logistician at the ALOC/BSOC, determines the status of operations at the TOC or acting TOC.

(2) Moves forward to reestablish a CP if necessary.

(3) Moves to the brigade CP to ensure that fire support operations continue uninterrupted as planned.

d) Links-up with the brigade commander.

2) The DS FA battalion S3:

a) Continues to command and control the DS FA battalion elements from the TOC until the battalion XO has been informed of the tactical situation and is in position to assume command.

b) Informs the batteries and reinforcing battalion of succession of command.

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.** [FM 6-20-1, Chap 7; FM 6-20, pp. 3-5 thru 3-6]

a. The DS FA battalion commander initiates the decision-making process for the next mission in order to rapidly transition from the current operation to the next and directs planning to protect the force during the brigade consolidation and reorganization. He directs the batteries to ensure that:

1) Fire support systems are mobile and correctly emplaced.

2) Components of the fire support system are protected from enemy action ranging from terrorist attack and by-passed enemy forces to indirect fires supporting a counter-attacking force.

c. The DS FA battalion commander directs the DS FA battalion S3/XO to plan for the hasty reorganization of fire support units. (Deliberate reorganization or reconstitution is not a DS FA battalion commander's prerogative.)

NOTE: Deliberate reorganization or reconstitution is not a DS FA battalion commander's prerogative. Deliberate reorganization is a permanent restructuring of the unit and must be approved by the parent unit commander one echelon higher than the unit reorganized. Regeneration requires that the unit be pulled out of combat and is not a prerogative of the battalion commander. The CSS plan should, from its inception, have planned for an immediate resupply of CL I/III/V at the conclusion of a major fight. These supplies should be on stand-by in the combat trains, and the tentative location and distribution scheme (by TSOP) should already be rehearsed as part of the operation.

1) Provide unit personnel:

a) Personnel support functions (cross leveling units, MWR functions).

2) Ensure that vehicles and individual and crew-served weapons are serviced and maintained. Repair deadlined or combat damaged equipment using repair parts available.

e. The DS FA battalion commander directs the staff to provide technical support to the batteries.

1) The DS FA battalion commander ensures that alternate command and control facilities are available.

2) The DS FA battalion commander ensures that the technical aspects of fire support (meteorology, survey and digital, automated fire control, and communications) are accurate and rapid.

f. The DS FA battalion commander confirms that the DS FA battalion is prepared to continue the mission. Confirmation criteria include: [AN]

1) All DS FA battalion elements report successful resupply, refit, and regeneration of combat power.

2) The DS FA battalion S3 reports all DS FA battalion C3 facilities, CPs, and systems are fully operational.

3) The DS FA battalion S2 reports that all intelligence systems are fully operational.

4) The DS FA battalion S3 reports that all fire support systems are fully operational and that FA assets are mission capable.

a) Firing units/batteries.

b) BnTF/company FSOs.

c) FIST/FIST-Vs.

d) COLT/FIST-Vs.

e) Target acquisition systems.

f) Air and naval gunfire liaison company firepower control teams.

LESSONS LEARNED

This component identifies the lessons learned extracted from the U.S. Army Center for Army Lessons Learned (CALL) publications relevant to performing this battlefield function (BF). The lessons learned are organized and listed by the appropriate task in the BF task list. Where appropriate to address the absence of a task in an Army Training and Evaluation Program - Mission Training Plan (ARTEP-MTP), the lessons learned have been structured as tasks and are included in the detailed task list as subtasks. The purpose of the lessons learned component is to provide the user with the most recent tactics, techniques and procedures (TTP) associated with the performance of the tasks in this BF.

1. **The direct support field artillery battalion commander directs and leads subordinate forces.**

LL- Opinions among professionals differ over where to locate the FSCOORD on the battlefield. Each opinion has merit, but when reduced to its simplest terms the FSCOORD must be positioned where he can best execute the fire support plan. The situation must determine where the FSCOORD is positioned. [CALL Newsletter, Fire Support For The Maneuver Commander, 90-1, p. 9]

LL- During the execution phase, the FSCOORD must position himself to respond to immediately influence fires in support of the operation. During the execution phase, field artillery units have found that when the operations officer directs the action in the operations center and the executive officer manages the administrative and logistics operations, the FSCOORD can concentrate on fighting the immediate battle and anticipating the changes that result from the dynamics of battle. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 9]

LL- Targeting intelligence must be aggressively sought out, continually evaluated against the attack criteria established by the maneuver commander, and routed to the appropriate fire support delivery system for engagement. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 2]

LL - Command information programs which provide the soldier realistic capabilities, information and solutions are required. Soldiers need to know! Explaining why certain TTPs are required during training is another method of providing the soldier with the information. Tying the capability to TTP reinforces the information. An especially effective technique used in North Africa was for all soldiers to fire their weapons at enemy vehicles and equipment on training ranges to gain confidence in the weapons and to see first hand the effects of the weapons on the enemy vehicles and equipment. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 22]

LL - Commanders often seek to maximize their control of the situation under stress. This may result in detailed orders to subordinates that stifle their initiative and

reduce the flexibility to respond to contingencies. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Good communication is always difficult, but stress and fatigue will greatly increase misunderstandings. Just because something is very clear to you, do not assume that it is clear to everyone else. Double-check communication. Use backbriefs and rehearsals. Staff visits and follow ups also foster good communications and can keep problems from recurring. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - The mental abilities required for effective C2 are those which first and foremost suffer from sleep loss. Sleep loss has been proven to decrease performance on tasks requiring calculations, creativity, anticipation and planning ahead. While we all can recognize the physical signs of fatigue in us and others, we seldom recognize mental lapses. Do not judge your level of degradation by how well you can still perform physically. Although there is the temptation to remain awake through intense planning sessions and engagements, adequate sleep discipline is fundamental for maintaining the abilities to develop and adjust plans. Three to four hours of uninterrupted sleep each day will maintain mental performance only for five to six days. Less sleep will lead to rapid declines. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Widespread agreement among the staff is not necessarily a healthy sign. It could mean that the desire to find agreement is overriding critical thinking. In times of stress there will be a natural desire to reduce that stress by increasing group harmony and ignoring problems. Be alert for group think and when you suspect it is occurring, take a devil's advocate position and actively find the flaws that everyone is missing. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Do not let stress make the situation appear worse than it is. Be calm and confident during the fight. It is inevitable that you will make mistakes. And some may be costly. Let your mistakes make you a better soldier instead of a worse one. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 26]

LL - The commander must plan and rehearse his own position and movement on the battlefield as carefully as is done for the overall plan. He must be forward to personally see critical points in the battle, yet protected in order to survive. [CALL Compendium, Vol 1: Heavy Forces]

LL - Commanders must demand that key leaders discipline themselves to obtain a minimum level of rest. [CALL 89-1: Non-Mechanized Forces]

LL - On the battlefield the command sergeant major can position himself where leadership is most needed. [CALL 89-1: Non-Mechanized Forces]

LL - NCOs must help set priorities of work by clarifying through the chain of command what must be done. [CALL: NCO Lessons Learned]

LL - The troops must be kept informed and the NCO must do it. [CALL: NCO Lessons Learned]

LL - The NCO must know and understand the commander's intent if he is to be effective and accomplish the unit's mission. [CALL: NCO Lessons Learned]

LL - The CSM is a vital source of information to the commander and is a key leader in dealing with NCOs. [CALL: NCO Lessons Learned]

LL - The command sergeant major has a tremendous impact on the soldier's performance, team cohesion, and unit effectiveness. He looks out for the welfare of their men and can foster a positive command climate. [CALL: NCO Lessons Learned]

LL - The CSM can greatly assist by:

* Identifying, correcting, and bringing to the commander's attention NCO leadership problems.

* Moving with the commander to assess unit morale and logistics problems. [CALL: NCO Lessons Learned]

LL - Doing all oneself simply will not work. There may be short-term success; but in the long run only disaster will result. Give subordinates responsibilities, train them to standard, give them authority, and hold them accountable. [CALL 90-6: The Musicians of Mars]

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.**

LL- The attack guidance is used to develop the commander criteria that is input into the TACFIRE system and will allow it to automatically perform a number of actions upon receipt of a fire mission. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 6]

LL- The maneuver commander owns the fire support plan. He must synchronize and concentrate all of his combat power at the critical time and place. Synchronizing and integrating the battlefield operating systems is fundamental to success on the battlefield. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 4]

LL- Coordination is essential to success. The locations of the supported units, the plans of the maneuver force, the locations and status of the fire support elements,

the fire support coordination measures, and guidance of the maneuver commander must be continually updated evaluated and coordinated throughout the entire battle. Establish and maintain communications channels to ensure that the needs of the force are met. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 3]

LL- Targeting intelligence must be aggressively sought out, continually evaluated against the attack criteria established by the maneuver commander, and routed to the appropriate fire support delivery system for engagement. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 2]

LL- The maneuver commander owns the fire support plan. He must synchronize and concentrate all of his combat power at the critical time and place. Synchronizing and integrating the battlefield operating systems is fundamental to success on the battlefield. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 4]

LL- At brigade and battalion levels, many units do not completely understand or implement the targeting process to develop an attack guidance matrix. Brigade and battalion commanders and their key staff members must get personally involved and support the process. Key personnel should religiously attend and actively participate in targeting meetings. This process leads to fire support synchronization by attacking the right targets with the right assets at the right times. The commander's intent for fires must specify what is to be done to the enemy. Targeting meetings determine "how." [Combat Training Centers (CTCs), Bulletin No. 93-4, p. 12]

LL- The execution phase of the fire support plan is the prosecution of the maneuver commander's intent. The fire support plan is an integral part of the maneuver commander's battle plan. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 1]

LL - The commander and XO should ensure that the tracking of enemy events related to the commanders intent during the battle is coordinated. [CTCs Bulletin No. 93-4, p. 27]

LL - Of major concern, battle tracking continues to cause problems for staffs. [CTCs Bulletin No. 94-1, p. 5]

LL - Commanders do not always have a clear vision of the battlefield because reports are either untimely or staff members do not seek and compile the critical information the commander needs to make his assessment. Battle tracking is an integrated staff effort at the command post. The key person in charge of the shift, the battle captain, must be able to manage the information flow in the command post and integrate all elements to track the battle. Units will succeed in this task if they take the time to establish an SOP for what information is required, how it is

received, tracked within the command post and then distributed. If units establish a battle-tracking system that corresponds with critical information requirements for the commander, chances of mission success will greatly improve. [CTCs Bulletin No. 94-1, p. 5]

LL - Minimum critical information (MCI) that should be tracked in the battalion TOC (both friendly and enemy forces) includes: relative combat power, unit locations, obstacle overlay, execution matrix, task organization and personnel status.

* Information boards need to be updated (at a minimum) every four hours.

* Have a designated individual track MCI.

* Conduct formal shift change briefs in the TOC. This process forces information updates and sharing.

* Logs and journals (DA 1594s) are excellent tools for details and historical purposes. However, consider adding a "significant activities" board in the TOC to share information. This should display significant activities of all the battlefield operating systems in the TOC. [CALL, News from the Front!]

LL - Situation assessment is not something you do just during mission analysis. It must be a continuous activity to avoid delays in comprehending important changes and events and to maintain the ability to respond rapidly. A good understanding of the situation is a start point for all staff operations. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 24]

LL - All uncertainties as to enemy status and responses, friendly capabilities and successes, terrain conditions, etc., should be resolved or reduced if possible, given the time available. If they cannot be resolved, then they must be treated as uncertainties -- not assumed away -- and contingencies considered for the most likely branches. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Under stress we revert to doing the things that are easiest and that we know best. Try to recognize when you are spending too much time doing simple tasks such as collating or sending messages. Make sure you are not focusing on simple, rote tasks to avoid difficult, but more important thinking tasks. Do not limit solutions to your branch specialty. Maintain a combined arms perspective and remember that staff coordination is essential to battlefield synchronization. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Good communication is always difficult, but stress and fatigue will greatly increase misunderstandings. Just because something is very clear to you, do not assume that it is clear to everyone else. Double-check communication. Use backbriefs and rehearsals. Staff visits and follow ups also foster good

communications and can keep problems from recurring. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - There is a human tendency to listen only to information that confirms our own beliefs and ignore or minimize information that is contrary. This appears to be especially true in stressful situations. Commanders and staffs must remain open to opposing opinions and assure that they have good reasons for rejecting contrary information. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 26]

LL - Battles are won and lost on the basis of errors. Commanders and staffs must be on the constant lookout for flaws in concepts, omissions in synchronization, and errors in critical estimates. Follow these guidelines for eliminating errors:

* Reflect on what is being done and why.
* Make a rough first guess for comparison to calculations.
* Have others check critical work.
* Check for consistency in estimates, concepts, and orders.
* Make sure that your message is understood.
* Follow good sleep discipline.
* Watch for waning concentration and automatic behavior.

[CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 26]

LL - The 24 hours a day war demands that TOC personnel be trained in all aspects of the TOC operation. [CALL Bulletin, No 1-86]

LL - Shift changeovers can cause a loss of continuity during an operation. No matter how good the changeover briefing is, there will be something lost. The shift schedules also gets disrupted because of TOC displacements which should occur frequently. [CALL Bulletin, No 1-86]

LL - All TOC personnel must understand the commander's concept and intent and what is supposed to happen at TAIs and NAIs. Supervisory personnel must be able to make basic tactical decisions, based on the situation, in the absence (for whatever the reason) of key leaders. [CALL Bulletin, No 1-86]

LL - The S2 section must continuously anticipate "tomorrow's battle" requirements to facilitate future planning. [CALL Bulletin No 3]

LL - The BICC performs the preliminary analysis for future operations. The S2 receives, analyzes, and disseminates current battle information to the commander. The next battle is an extension of the current operation. The BICC continues to develop the IPB to support the next operation. [CALL Bulletin No 3]

LL - The task force commander must have an effective TOC to react to the fast pace on the AirLand battlefield. [NTC Lessons Learned, CALL Bulletin No 4: Command and Control System]

LL - The TOC should analyze all sources of information and make recommendations to the task force commander. The TOC must keep abreast of adjacent units and advise the commander, companies and separate platoons accordingly. The TOC should be able to plan for the next battle and direct functions for the commander which he is too busy to personally direct. [NTC Lessons Learned, CALL Bulletin No 4: Command and Control System]

LL - TOCs should:

* Track the Battle. This consists of monitoring current location, activity and combat power of task force elements; monitoring the progress of adjacent and supporting units and updating templates.

* Analyze Data. The TOC must analyze all incoming reports from the company/teams, other task force elements, higher headquarters, adjacent units and supporting units. After the TOC analyzes these reports they pass the results to the task force commander and recommend any changes to the present course of action.

* Plan for Future Operations. The significant activity in adjacent and higher units or receipt of the warning order initiates planning. The TOC staff must immediately begin to consider possible courses of actions, probable enemy actions, support requirements, etc. The TOC must also initiate a task force warning order and ensure the S1-S4 are immediately brought in on the planning.

* Disseminate information. The TOC should keep the battalion/task force informed of any action or development that might influence the battle. One technique is to provide an intel summary from analyzed reports off of the O&I net. This summary should be concise and given periodically over the battalion net. This summary could also be used to inform higher headquarters.

* The TOC must be able to break-down, move and set-up quickly and with the minimum disruption to its operation.

* The TOC must be able to write and produce overlays in the field under all conditions.

[NTC Lessons Learned, CALL Bulletin No 4: Command and Control System]

3. **The direct support field artillery battalion commander visualizes the battlefield.**

LL- Targeting intelligence is available from many sources at all echelons. The intelligence gathered by the maneuver force and fire support sources is invaluable to each other, and to the force commander. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 2]

LL- Coordination is essential to success. The locations of the supported units, the plans of the maneuver force, the locations and status of the fire support elements, the fire support coordination measures, and guidance of the maneuver commander must be continually updated evaluated and coordinated throughout the entire battle. Establish and maintain communications channels to ensure that the needs of the force are met. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 3]

LL- The execution phase of the fire support plan is the prosecution of the maneuver commander's intent. The fire support plan is an integral part of the maneuver commander's battle plan. [CALL Newsletter, Fire Support for the Maneuver Commander, 90-1, p. 1]

LL - Do not underestimate your opponent. At the outbreak of conflicts, there is a common tendency to underestimate the opponent's military abilities. At the beginning of the U.S. Civil War, both sides soldiers thought they could win quickly and easily. In many training exercises, U.S. planners seem to assume that because the opponent is culturally different, not a world power, or technologically inferior, he will be easy to defeat. After the enemy is more successful than anticipated, then it is common to overestimate his capabilities. Maintain a realistic, balanced perspective on enemy capabilities. Plan ahead. The reality of violent combat can cause commanders and staffs to concentrate on just the immediate battle. This is especially true if operations do not go exactly as planned. Yet most of our potential adversaries fight in echelons, and, in a fast-paced battle, we must be preparing to meet the second echelon while fighting the first. Eliminate future surprises by planning for the next battle during the current fight. See the entire battlefield. Under stress it is more comfortable to narrow your focus to your immediate control and within your own boundaries. What is happening on your flanks and rear is critical to accomplishing your mission. The support you might get from the flanks and from higher command could be critical to accomplishing your mission. Commanders and staffs must consider the bigger picture when planning and conducting their operations. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 23]

LL- There must be backup responsible individuals assigned to fire direct or indirect fires on an obstacle. The responsible person must understand intent, triggers, frequencies, target numbers and other key info needed to secure the obstacle from

enemy breaching and reduction. [Lessons Learned Bulletin]

LL - Some leaders try to analyze and decide by themselves. They isolate themselves from open discussion of their ideas and plans. Under stress, individuals' judgment is typically degraded, and it becomes more crucial than ever for leaders to use their senior staff to test the validity of their ideas. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 24]

LL - Situation assessment is not something you do just during mission analysis. It must be a continuous activity to avoid delays in comprehending important changes and events and to maintain the ability to respond rapidly. A good understanding of the situation is a start point for all staff operations. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 24]

LL - All uncertainties as to enemy status and responses, friendly capabilities and successes, terrain conditions, etc., should be resolved or reduced if possible, given the time available. If they cannot be resolved, then they must be treated as uncertainties -- not assumed away -- and contingencies considered for the most likely branches. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Commanders must visualize the battlefield:

* Study enemy order of battle, doctrine, and tactics. A thorough knowledge of the enemy will allow the commander to visualize enemy actions as certain cues are seen or reported.

* A thorough IPB to include verification of the situation template by recon assets will add to the mental picture.

* Detailed, yet concise reports from trusted agents or subordinates regarding both friendly and enemy movements or activities throughout the course of the battle is a necessity.

* The unit tactical operations center must forward concise reports to the commander on information gained from higher and adjacent units. This must include both friendly and enemy activities.

* Personal reconnaissance of the battlefield must be done for each new mission regardless of previous familiarity with the terrain.

[CALL Compendium, Vol 1: Heavy Forces]

4. **The direct support field artillery battalion commander directs changes to the operation or plan.**

LL - The following procedures warrant special consideration:

* Warning orders enjoy greater emphasis.

* Units must routinely move without the presence of commanders. They must train to this requirement.

* To the maximum degree possible, commanders and staffs should go forward to issue orders. This buys critical time for subordinate commanders.

* Don't drive when you can fly. Maximum use should be made of aviation assets to buy commanders time. This is true at all levels of command.

[CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 23]

LL - Mission-type orders are more effective in fast-paced modern warfare with all its uncertainties. However, the opposite extreme should be avoided. Commanders should clearly specify intent and provide sufficient control measures to ensure unity of purpose. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Good communication is always difficult, but stress and fatigue will greatly increase misunderstandings. Just because something is very clear to you, do not assume that it is clear to everyone else. Double-check communication. Use backbriefs and rehearsals. Staff visits and follow ups also foster good communications and can keep problems from recurring. [CALL Newsletter No. 90-8: Special Edition: Winning in the Desert II, p. 25]

LL - Send multiple warning orders to maximize subordinate planning and preparation time. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 3]

LL - Conduct parallel planning by providing subordinate commanders the concept of the operation and specified tasks when they are developed. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 3]

LL - Determine the necessary information required to complete the commander's METT-T analysis. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 4]

LL - Assist the commander by identifying and listing constraints, restrictions, and specified and implied tasks. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 6]

LL - Analyze the mission completely by accomplishing the following:

* Review the commanders' intent of the two higher echelons.

* Identify the unit's constraints and restrictions.

* Identify the unit's specified and implied tasks.

* Derive the essential tasks from the specified and implied tasks.

[CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 6]

LL - Commander: determine the amount of planning guidance the staff requires to develop the plan. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 9]

LL - Commander: sketch the initial concept of the operation for the staff. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 9]

LL - Staff: take notes on the commander's guidance. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 9]

LL - Commander: have the staff backbrief you on your guidance. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 9]

LL - Commander: preserve subordinate commanders' time. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 12]

LL - Commander and staff: develop a planning and preparation timeline. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 12]

LL - Commander and staff: refine the timeline by listing tasks to be accomplished during planning and preparation and the person responsible to complete the task. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 12]

LL - Commander and staff: use the timeline to track the progression of preparation. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 12]

LL - Staff: develop courses of action together to integrate all battlefield operating systems. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 16]

LL - Staff: ensure the course of action is complete, consistent with doctrine, complies with the commander's guidance, feasible, and unique. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 16]

LL - Staff: develop courses of action that identify what, when, where, how, and why the unit will execute. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 16]

LL - Commander if time is short, remain with the staff and have it assist you in course-of-action development. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 16]

LL - Commander and staff: use the war-gaming sequence to develop and begin synchronizing the operation. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 22]

LL - Staff: conduct a detailed analysis with the entire staff to determine the recommended course of action. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 23]

LL - Staff: use a decision matrix with criteria developed from commanders' guidance, critical events, and other significant factors pertaining to the mission to analyze the courses of action. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 23]

LL - Staff: quantify each course of action by ranking them for each criterion. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 23]

LL - Commander: specify through guidance the type of order to issue (written five-paragraph, oral, overlay or matrix). [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 27]

LL - Staff: develop a preformatted order to use for written orders. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 27]

LL - Staff: organize reproduction by centralizing collection of the portions of the order and its production. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 27]

LL - Staff: select an area to reproduce the order that will not interfere with the staff's work. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 27]

LL - Staff: use a mimeograph or a photocopier to speed reproduction of order text. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 27]

LL - Staff: use a photocopier to reproduce graphics. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 27]

LL - Commander: provide clear and detailed planning guidance, and remain close to the staff during the MDMP. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 28]

LL - Commander: allocate time to review and approve the order before it is reproduced and briefed. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 28]

LL - Staff: organize the briefing to follow the written order format. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 31]

LL - Commander: control the briefing to stop distractions. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 31]

LL - Commander: review your intent and address each subordinate directly to ensure he understands how his mission relates to your intent. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 31]

LL - Staff: use graphic aids to better present the order. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 31]

LL - Commander: conduct confirmation briefs and backbriefs with subordinates. [CALL Newsletter No. 93-3: Battalion and Brigade Battle Staff, p. 34]

LL - Frequent changes in task organization should be avoided. The teamwork advantage is often far more important than a slightly more desirable mix of forces. Also, the timing of a change requires careful analysis. The significant advantage of a daylight link-up and the time required to receive the OPORD and to coordinate SOPs and LOGPACs must be considered. [NTC Commander's Memorandum]

LL - Adhere to a disciplined system of time management. Someone must establish a timed critical list based on each mission and enforce it. The 1/3-2/3 rule is a guide but METT-T dependent. [CALL Compendium, Vol 1: Heavy Forces]

LL - One of the best forms of commander's guidance is rough maneuver and fire support graphics drawn by the commander and given to the staff to focus staff planning. [CALL Compendium, Vol 1: Heavy Forces]

LL - Employ clear/concise written orders:

* Clear written orders greatly reduce the fog of war to tired leaders. They provide a checklist for exhausted leaders to remind themselves what their mission and the commander's intent really is.

* The limiting factor on the conciseness of the order is how well the unit understands the commander's intent.

[CALL Compendium, Vol 1: Heavy Forces]

LL - Immediately after the commander issues the order, his subordinates backbrief the commander on their tentative concepts of operations. If these are in line with the commander's intent, his subordinates understand the order. If not, the commander clarifies the plan. [CALL Compendium, Vol 1: Heavy Forces]

LL - Leaders must give the greatest amount of available time to subordinate leaders. Use no more than 1/3 of the available time for planning and preparation of the order. Provide no less than 2/3rds of the available time for subordinate units to

prepare for combat. Prioritize critical tasks and use available time to concentrate on those tasks. [CALL 89-1: Non-Mechanized Forces]

LL - Time available dictates the amount of detail allowed in planning. [CALL 89-1: Non-Mechanized Forces]

LL - Reverse planning is an indispensable technique for time management. Begin with the time an event must take place (i.e. LD time) and estimate the time each prior event will take. [CALL 89-1: Non-Mechanized Forces]

LL - A brief order that clearly defines the intent of the commander requires less effort to execute. It is better to provide a good plan quickly and to refine it later, than to delay preparation until the best plan is completed and time limited. [CALL Bulletin No. 89-2: Heavy-Light Lessons Learned]

LL - Hard copy follow-up on verbal orders/decisions. Many decisions are made in face to face discussions between commanders. Sometimes problems arise when these discussions are away from the Cp. This causes problems for the staff in synchronizing the various aspects of the operation as well as keeping the other players informed. Hard copy back up needs to be generated to assist in this process. [CALL: Corps-Division Lessons Learned]

5. **The direct support field artillery battalion command posts manage and maintain command, control, and communications.**

LL -

* Ensure the succession of command is specified by SOP or OPORD; identify the primary location on the battlefield of the second in command.

* Ensure the unit knows the priority for command succession.

* Ensure that personnel identified in the succession of command are thoroughly familiar with the mission and the commander's intent through use of backbriefs and rehearsals.

* Continue to develop junior leaders through effective training.

[CTCs Bulletin No. 94-1, p. 19]

LL - Destruction of the TOC, while a catastrophic loss, must not prevent the force from continuing its mission. [NTC Lessons Learned, CALL Bulletin No 4: Command and Control System]

LL - ALOC personnel must track the battle and keep abreast of the current tactical situation at all times. [NTC Lessons Learned, CALL Bulletin No 4: Command and Control System]

LL - At a minimum, the ALOC must have all friendly situation information posted, the most recent intelligence preparation of the battlefield (IPB) update, the most current doctrinal and situational templates of suspected enemy locations, and known enemy locations. Both the obstacle plan and target overlay must be posted and kept current. [NTC Lessons Learned, CALL Bulletin No 4: Command and Control System]

LL - All the NCOs, and even some of the more experienced soldiers of lower rank, must stay aware of the tactical situation and be prepared mentally to take charge. [CALL: NCO Lessons Learned]

LL - NCOs must help set priorities of work by clarifying through the chain of command what must be done. [CALL: NCO Lessons Learned]

LL - The troops must be kept informed and the NCO must do it. [CALL: NCO Lessons Learned]

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.**

LL- Firing batteries need to train more on ground combatives and survivability skills. They either do not understand, or adhere to, guidelines in Appendix H, FM 6-50, The Field Artillery Cannon Battery. Batteries do not carry sufficient CL IV in their unit basic load (UBL). Construction of fighting positions is often inadequate. Perimeter defenses are rarely coordinated or integrated and reaction to attack is not well planned or rehearsed. [CTCs, Bulletin No. 93-4, p. 11]

LL - All the NCOs, and even some of the more experienced soldiers of lower rank, must stay aware of the tactical situation and be prepared mentally to take charge. [CALL: NCO Lessons Learned]

LL - NCOs must help set priorities of work by clarifying through the chain of command what must be done. [CALL: NCO Lessons Learned]

LL - The troops must be kept informed and the NCO must do it. [CALL: NCO Lessons Learned]

GATE TASKS

This component identifies critical individual or collective tasks upon which each battlefield function (BF) task identified in the task list is dependent. In order to ensure efficient and safe training of the major task, the participants should have achieved a level of proficiency or understanding in these gate tasks.

TASKS	INDIVIDUAL/COLLECTIVE PROFICIENCIES
1. **The direct support field artillery battalion commander directs and leads subordinate forces.**	**DS FA Bn Cdr** [STP 21-II-MQS] - Communicate effectively as a Cdr or staff officer. [03-9001.12-0003] - Solve problems using the military problem-solving process. [03-9001.13-0001] [STP 6-13II-MQS] - Advise maneuver Cdr on employment of available fire support (FS) assets. [01-2999.94-0106] - Plan FA support of maneuver units. [01-2999.94-0100] **DS FA Bn XO** [STP 21-II-MQSs] - Communicate effectively as a Cdr or staff officer. [03-9001.12-0003] - Solve problems using the military problem-solving process. [03-9001.13-0001] [STP 6-13II-MQS] - Recommend FSCM. [01-299.94-0101] - Develop a FASP. [01-2999.94-0104] [STP 6-13II-MQS] - Develop an FS plan to support a defensive operation. [01-2660.00-2009] - Develop an FS plan to support an offensive operation. [01-2660.00-2008]

DS FA Bn S3

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[ARTEP 6-115-MTP]

- Prepare Bn operations estimates, tactical plans, and movement orders. [06-3-01-2120]

[STP 19-31-II-MQS]

- Direct CP and tactical center internal security operations. [01-3761.00-1103]

[STP 6-13II-MQS]

- Plan FA support of maneuver units. [01-2999.94-0100]
- Recommend FSCM. [01-299.94.0101]
- Develop an FS plan to support an offensive operation. [01-2660.00-2008]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Apply the FSCM. [01-2840.00-2025]
- Direct the establishment of and verify Cdr's criteria. [01-2770.01-0115]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]
- Direct processing of the FS request. [01-2770.01-0133]
- Coordinate employment of FA survey and meteorological assets. [01-2999.94-0107]
- Coordinate employment of FA target acquisition assets. [01-2999.94-0103]

DS FA Bn S2

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 34-35II-MQS, Intelligence]
- Conduct situation development. [01-3381.01-4016]
- Prepare the intelligence estimate. [01-3381.41-4004]
- Recommend force protection countermeasures. [01-3381.16-5003]

DS FA Bn S3 Section
[ARTEP 6-115-MTP]
- Manage operations reports and information. [06-3-01-2150]
- Prepare Bn operations estimates, tactical plans, and movement orders. [06-3-01-2120]

[STP 17-12II-MQS]
- Perform a map reconnaissance. [01-1250.00-0002]

Bde FSO
[STP 6-13II-MQS]
- Plan FA support of maneuver units. [01-2999.94-0100]
- Recommend FSCM. [01-299.94.0101]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Recommend FSCM, and coordinate fires. [01-2840.00-2042]
- Apply the FSCM. [01-2840.00-2025]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn Battery Commander
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

Bde Targeting Officer
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 34-96B14-SM-TG, Intelligence Analyst]
- Coordinate targeting function. [301-336-4100]

[STP 34-35II-MQS, Intelligence]
- Conduct target development. [01-3381.01-4017]

2. **The direct support field artillery battalion commander, with staff assistance, commands, controls, and synchronizes the field artillery cannon battalion fire support operations.**

DS FA Bn Cdr
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 6-13II-MQS]
- Advise maneuver Cdr on employment of available FS assets. [01-2999.94-0106]
- Plan FA support of maneuver units. [01-2999.94-0100]

DS FA Bn XO
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 6-13II-MQS]
- Recommend FSCM. [01-299.94-0101]
- Develop a FASP. [O1-2999.94-0104]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]

DS FA Bn CSM
[STP 21-24-SMCTs]
- Inspect personnel/equipment. [071-328-5301]

[ARTEP 71-2-MTP]
- Assist in planning for establishment/occupy/ depart of assembly areas. [7-1-3002]

DS FA Bn S2

[STP 21-II-MQS, Common Tasks]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 34-35II-MQS, Intelligence]
- Conduct intelligence liaison. [01-3381.166-5001]
- Conduct battlefield area evaluation. [01-3381.01-4012].
- Conduct terrain and weather analysis. [01-3381.01-4013]
- Prepare OB studies. [01-3381.41-4015]
- Conduct threat evaluation. [01-3381.01-4014]
- Participate in the threat integration process. [01-3381.01-4015]
- Conduct situation development. [01-3381.01-4016]
- Conduct target development. [01-3381.01-4017]
- Prepare the intelligence estimate. [01-3381.41-4004]

DS FA Bn Intelligence Section

[STP 34-35II-MQS, Intelligence]
- Participate in the development of intelligence requirements. [01-3381.01-5001]
- Conduct battlefield area evaluation. [01-3381.01-4012]
- Conduct target development. [01-3381.01-4017]
- Recommend force protection countermeasures. [01-3381.16-5003]
- Disseminate intelligence and combat information. [01-3381.39-4005]

- Analyze intelligence and combat information. [01-3381.39-4004]
- Record intelligence and combat information. [01-3381.39-4003]
- Direct analysis and dissemination of information. [01-3381.41-5002]
- Direct collection management operations. [01-3381.44-5002]

[ARTEP 34-245-10-DRILL, Intelligence section]
- Record intelligence information. [Drill 1]

DS FA Bn Senior Intelligence NCO
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

[STP 34-35II-MQS, Intelligence]
- Conduct intelligence and EW support element operations. [01-3381.04-5003]

[STP 34-96B14-SM-TG, intelligence analyst]
- Coordinate targeting function. [301-336-4100]
- Supervise preparation/maintenance of SIT MAP by subordinate personnel. [301-336-3051]
- Supervise receipt/transfer/storage of classified material. [301-336-3201]
- Supervise preparation of intelligence estimate. [301-336-3104]

DS FA Bn S3
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Brief to inform, persuade, or direct. [01-9007.01-0250]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 6-13II-MQS]
- Plan FA support of maneuver units. [01-2999.94-0100]

- Recommend FSCM. [01-299.94.0101]
- Develop an FS plan to support an offensive operation. [01-2660.00-2008]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Apply the FSCM. [01-2840.00-2025]
- Direct the establishment of and verify Cdr's criteria. [01-2770.01-0115]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]
- Direct processing of the FS request. [01-2770.01-0133]
- Coordinate employment of FA survey and meteorological assets. [01-2999.94-0107]
- Coordinate employment of FA target acquisition assets. [01-2999.94-0103]

DS FA Bn S3 Section

[ARTEP 6-115-MTP]

- Manage operations reports and information. [06-3-01-2150]

DS FA Bn Operations Sgt

[STP 6-13F14-SM-TG]

- Pass FS information of lower, adjacent, and higher FA elements. [061-284-3046]
- Post information on a SIT MAP/overlay. [061-284-1011]

[STP 21-24-SMCT, Common Tasks]

- Prepare a SITREP. [071-332-5022]

[STP 21-24-SMCTs]

- Prepare a strip map. [551-721-3359]

DS FA Bn FDO

[STP 21-II-MQSs]

- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 6-13II-MQS]

- Supervise a Bn FDC. [01-2999.94-0102]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]

- Direct the evaluation and dissemination of intelligence reports using TACFIRE. [01-2770.01-0114]
- Direct the processing of special missions. [01-2770.01-0112]
- Direct processing of the FS request. [01-2770.01-0133]

DS FA Bn RSO

[STP 6-13II-MQS]

- Plan establishment of FA survey control. [01-2999.97-0403]
- Verify FA survey computations. [01-2999.97-0404]

DS FA Bn CMLO

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Perform a map reconnaissance. [01-1250.00-0002]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 3-74II-MQS, Chemical]

- Identify operations and functions of chemical units and staffs. [S1-5060.02-2138]

Bde FSO

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

[STP 6-13II-MQS]

- Advise maneuver Cdr on employment of available FS assets. [01-2999.94-0106]
- Plan FA support of maneuver units. [01-2999.94-0100]
- Recommend FSCM. [01-299.94-0101]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Advise the Cdr on the capabilities of available target acquisition assets. [01-3020.00-7002]

- Advise the maneuver Cdr on TACFIRE operations. [01-2770.01-0118]
- Advise the maneuver Cdr on employment of COLTS. [01-2840.00-2039]
- Recommend FSCM and coordinate fires. [01-2840.00-2042]
- Apply the FSCM. [01-2840.00-2025]
- Direct the establishment of and verify cdr's criteria. [01-2770.01-0115]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]

Bde FSE
[ARTEP 6-115-20-MTP]
- Provide Bde-level FS coordination. [06-3-02-1100]

DS FA Bn S1
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S1 Section
[ARTEP-6-115-MTP]
- Perform strength accounting. [12-1-C404]
- Process replacements. [12-1-C405]
- Provide mail services. [12-1-C402]
- Perform administrative functions. [12-1-C406]
- Coordinate and establish a temporary EPW collection point. [12-1-C407]

DS FA Bn Chaplain
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn Surgeon
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S4

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 9-91 BCII-MQS, Ordinance]

- Oversee the planning, establishment, and management of a multi-functional tactical CP. [01-9253.00-0002]

[STP10-92ABDII-MQS, Quartermaster]

- Determine field locations for CSS units. [01-9253.00-0003]

DS FA Bn S4 Section

[STP 9-91-BCII-MQS]

- Evaluate CL IX performance. [01-4716.26-0002]
- Assess unit capabilities to support proposed operations. [S3-5101.00-0229]

DS FA Bn SO

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 11-25II-MQS, Signal]

- Implement communications system control element operations. [01-5753.07-002]
- Manage network traffic routing. [01-5710.07-002]
- Perform distribution management of communications variables for combat radio operations using battlefield SOI system. [01-5880.07-001]
- Employ communications system of a maneuver Bde or Bn. [01-5841.07-001]

- Identify data communications techniques used with tactical communications systems. [01-5769.04-0001]

DS FA Bn HHB Cdr
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn HHB First Sgt
[STP 21-24-SMCTs]
- Inspect personnel/equipment. [071-328-5301]
- Prepare an oral operation order. [071-326-5626]
- Prepare a strip map. [551-721-3359]
- Supervise unit preventive medicine and field sanitation procedures. [081-831-0102]
- Conduct OPSEC procedures. [113-573-0002]
- Perform duties as convoy Cdr. [551-721-4326]
- Integrate risk management into mission. [850-001-4001]
- Supervise unit preparation for NBC attack. [031-503-4002]

[STP 6-13B24-SM-TG]
- Prepare and/or defend a unit against an attack. [061-266-4014]

3. **The direct support field artillery battalion commander visualizes the battlefield.**

DS FA Bn Cdr
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn XO
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S2
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 34-35II-MQS]
- Participate in the development of intelligence requirements. [01-3381.01-5001].
- Direct the intelligence portion of the IPB process. [01-3381.01-5002]
- Prepare the intelligence estimate. [01-3381.41-4004]

DS FA Bn Intelligence Section
[ARTEP 34-245-10-DRILL, Intelligence Section]
- Perform IPB. [Drill 2]

DS FA Bn S3
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]
- Direct CP and tactical center internal security. [01-3761.00-1103]

[STP 6-13II-MQS]
- Plan FA support of maneuver units. [01-2999.94-0100]
- Recommend FSCM. [01-299.94.0101]
- Develop an FS plan to support an offensive operation. [01-2660.00-2008]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Apply the FSCM. [01-2840.00-2025]
- Direct the establishment of and verify cdr's criteria. [01-2770.01-0115]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]
- Direct processing of the FS request. [01-2770.01-0133]
- Coordinate employment of FA survey and meteorological assets. [01-2999.94-0107]

- Coordinate employment of FA target acquisition assets. [01-2999.94-0103]

DS FA Bn S3 Section
[ARTEP 6-115-MTP]
- Manage operations reports and information. [06-3-01-2150]
- Prepare Bn operations estimates, tactical plans, and movement orders. [06-3-01-2120]

DS FA Bn CMLO
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S1
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn Chaplain
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn Surgeon
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S4
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 9-91 BCII-MQS]
- Evaluate Cl IX performance. [01-4716.26-0002]

[STP 10-92ABDII-MQS]
- Determine Cl V (conventional) requirements. [O1-4000.11-1111]
- Determine and verify water requirements for a unit. [O1-5103.00-0030]

- Assess unit capabilities to support proposed operations. [S3-5101.00-0229]

[STP 55-88 II-MQS]
- Determine aircraft requirements to move cargo, equipment, and personnel. [01-7320.70-0460]

DS FA Bn S4 Section
[STP 10-92A35-SM-TG]
- Check the accuracy of the PLL using the automated unit level logistics system (ULLS). [101-525-3015]

[STP 10-92Y24-SM-TG, Unit Supply Spec]
- Inspect and provide technical assistance to units. [101-521-4101]
- Check accuracy of PLL records. [101-521-4107]
- Check accuracy of the army maintenance management system maintenance and historical records. [101-521-4108]

[STP 10-94B25-SM-TG]
- Determine requirements and establish procedures in support of field operations. [101-524-3279]

[STP 10-76X24-SM-TG, Subsistence Supply Spec]
- Review the basic daily food allowance. [101-520-4154]
- Prepare the schedule of field ration issues. [101-520-4104]
- Plan a field storage layout. [101-520-4153]

DS FA Bn SO
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn Btry Cdr
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

4. **The direct support field artillery battalion commander directs changes to the operation or plan.**

DS FA Bn Cdr
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn XO
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S2
[STP 34-35II-MQS, Intelligence]
- Participate in the development of intelligence requirements. [01-3381.01-5001]
- Direct the intelligence portion of the IPB process. [01-3381.01-5002]
- Conduct battlefield area evaluation. [013381.01-4012]
- Conduct terrain and weather analysis. [01-3381.01-4013]
- Prepare OB studies. [01-3381.41-4015]
- Conduct threat evaluation. [01-3381.01-4014]
- Participate in the threat integration process. [01-3381.01-4015]
- Conduct situation development. [01-3381.01-4016]
- Conduct target development. [01-3381.01-4017]
- Prepare the intelligence estimate. [01-3381.41-4004]

DS FA Bn Intelligence Section
[ARTEP 34-245-10-DRILL, Intelligence Section]
- Perform IPB. [Drill 2]

Senior Intelligence NCO
[STP 34-96B14-SM-TG, Intelligence Analyst]
- Review current intelligence holdings to identify gaps. [301-336-2004]
- Supervise preparation of intelligence estimate. [301-336-3104]

- Recommend area of interest and operation based on METT-T. [301-336-4000]
- Supervise organization and maintenance of order of battle information. [301-336-2001]

DS FA Bn S3

[STP 21-II-MQSs]
- Perform a map reconnaissance. [01-1250.00-0002]
- Plan the IPB. [01-3353.02-0090]

[ARTEP 6-115-MTP]
- Coordinate staff actions. [06-3-01-2160]
- Prepare Bn operations estimates, tactical plans, and movement orders. [06-3-01-2120]

[STP 21-II-MQSs]
- Direct CP and tactical center internal security operations. [01-3761.00-1103]

[STP 6-13II-MQS]
- Plan FA support of maneuver units. [01-2999.94-0100]
- Recommend FSCM. [01-299.94.0101]
- Develop an FS plan to support an offensive operation. [01-2660.00-2008]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Apply the FSCM. [01-2840.00-2025]
- Direct the establishment of and verify cdr's criteria. [01-2770.01-0115]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]
- Direct processing of the FS request. [01-2770.01-0133]
- Coordinate employment of FA survey and meteorological assets. [01-2999.94-0107]
- Coordinate employment of FA target acquisition assets. [01-2999.94-0103]

DS FA Bn S3 Section
[ARTEP 6-115-MTP]
- Manage operations reports and information. [06-3-01-2150]
- Prepare Bn operations estimates, tactical plans, and movement orders. [06-3-01-2120]

[STP 21-II-MQSs]
- Perform a map reconnaissance. [01-1250.00-0002]

DS FA Bn Operations Sgt
[STP 6-13F14-SM-TG]
- Pass FS information of lower, adjacent, and higher FA elements. [061-284-3046]
- Post information on a SIT MAP/overlay. [061-284-1011]

[STP 21-24-SMCT, Common Tasks]
- Prepare a SITREP. [071-332-5022]
- Prepare a strip map. [551-721-3359]

DS FA Bn CMLO
[STP-II-MQS]
- Perform a map reconnaissance. [01-1250.00-0002]
- Plan the IPB. [01-3353.02-0090]

DS FA Bn S1
[ARTEP 6-115-MTP]
- Participate in the operations order process. [12-1-C408]

DS FA Bn S1 Section
[ARTEP 6-115-MTP]
- Participate in the operations order process. [12-1-C408]

DS FA Bn S4
[STP 10-92ABDII-MQS]
- Assess unit capabilities to support proposed operations. [S3-5101.00-0229]

- Prepare command logistics plans, estimates, and orders. [03-5106.00-0166]

[STP 55-88 II-MQS]
- Plan logistics support for maintenance operations. [01-4720.26-0001]
- Plan evacuation of equipment. [01-4999-26-0001]
- Plan convoy operations. [01-7300.75-0500]
- Plan use of host-nation assets. [01-7320.70-0435]
- Plan highway net use. [01-7320.75-0535]
- Request host-nation transportation support. [01-7320.70-0480]

DS FA Bn SO
[STP 11-25II-MQS, Signal]
- Prepare and review signal estimates, plans, and orders. [01-5765.04-9001]

5. The direct support field artillery battalion command posts and staff manage and maintain command, control and communications.

DS FA Bn Cdr
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

DS FA Bn XO
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

[STP 9-91 BCII-MQS, Ordinance]
- Oversee the planning, establishment, and management of a multi-functional tactical CP. [01-9253.00-0002]

[STP10-92ABDII-MQs]
- Determine field locations for CSS units. [01-9253.00-0003]

DS FA Bn S4 Section
[STP 10-92ABDII-MQS]
- Assess unit capabilities to support proposed operations. [S3-5101.00-0229]

DS FA Bn S3

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

[STP 6-13II-MQS]

- Plan FA support of maneuver units. [01-2999.94-0100]
- Recommend FSCM. [01-299.94.0101]
- Develop an FS plan to support an offensive operation. [01-2660.00-2008]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Apply the FSCM. [01-2840.00-2025]
- Direct the establishment of and verify cdr's criteria. [01-2770.01-0115]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]
- Direct processing of the FS request. [01-2770.01-0133]

DS FA Bn Assistant S3

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

[ARTEP 6-115-MTP]

- Prepare Bn operations estimates, tactical plans, and movement orders. [06-3-01-2120]

DS FA Bn HHB Cdr

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

DS FA Bn S4

[STP 21-II-MQSs]

- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

[STP 9-91 BCII-MQS, Ordinance]

- Oversee the planning, establishment, and management of a multi-functional tactical CP. [01-9253.00-0002]

- Direct CP and tactical center internal security operations. [01-3761.00-1103]

DS FA Bn S1
[STP 21-II-MQSs]
- Communicate effectively as a Cdr or staff officer. [03-9001.12-0003]

[STP 9-91BCII-MQS, Ordinance]
- Oversee the planning, establishment, and management of a multi-functional tactical CP. [1-9253.00-0002]

6. **The direct support field artillery battalion commander provides leadership and directs planning to ensure that the fire support system is sustained.**

DS FA Bn Cdr
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn XO
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S2
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 34-35II-MQS]
- Participate in the development of intelligence requirements. [01-3381.01-5001]
- Direct the intelligence portion of the IPB process. [01-3381.01-5002]
- Prepare the intelligence estimate. [01-3381.41-4004]

DS FA Bn Intelligence Section
[ARTEP 34-245-10-DRILL, Intelligence Section]
- Perform IPB. [Drill 2].

DS FA Bn S3

[STP 21-II-MQSs]

- Solve problems using the military problem-solving process. [03-9001.13-0001]
- Direct CP and tactical center internal security operations. [01-3761.00-1103]

[STP 6-13II-MQS]

- Plan FA support of maneuver units. [01-2999.94-0100]
- Recommend FSCM. [01-299.94.0101]
- Develop an FS plan to support an offensive operation. [01-2660.00-2008]
- Develop an FS plan to support a defensive operation. [01-2660.00-2009]
- Apply the FSCM [01-2840.00-2025]
- Direct the establishment of and verify cdr's criteria. [01-2770.01-0115]
- Direct the establishment of a fire plan in the TACFIRE computer. [01-2770.01-0115]
- Direct processing of the FS request. [01-2770.01-0133]
- Coordinate employment of FA survey and meteorological assets. [01-2999.94-0107]
- Coordinate employment of FA target acquisition assets. [01-2999.94-0103]

DS FA Bn S3 Section

[ARTEP 6-115-MTP]

- Manage operations reports and information. [06-3-01-2150]
- Prepare Bn operations estimates, tactical plans, and movement orders. [06-3-01-2120]

DS FA Bn CMLO

[STP 21-II-MQSs]

- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S1

[STP 21-II-MQSs]

- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn surgeon
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

DS FA Bn S4
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

[STP 9-91 BCII-MQS, Ordinance]
- Evaluate Cl IX performance. [01-4716.26-0002]

[STP 10-92ABDII-MQS]
- Determine Cl V (conventional) requirements. [01-4000.11-1111]
- Determine and verify water requirements for a unit. [01-5103.00-0030]
- Assess unit capabilities to support proposed operations. [S3-5101.00-0229]

[STP 55-88 II-MQS]
- Determine aircraft requirements to move cargo, equipment, and personnel. [01-7320.70-0460]

DS FA Bn S4 Section
[STP 10-92A35-SM-TG]
- Check the accuracy of the PLL using the automated ULLS. [101-525-3015]

[STP 10-92Y24-SM-TG]
- Inspect and provide technical assistance to units. [101-521-4101]
- Check accuracy of PLL records. [101-521-4107]
- Check accuracy of the army maintenance management system maintenance and historical records. [101-521-4108]

[STP 10-94B25-SM-TG]
- Determine requirements and establish procedures in support of field operations. [101-524-3279]

[STP 10-76X24-SM-TG]
- Review the basic daily food allowance. [101-520-4154]
- Prepare the schedule of field ration issues. [101-520-4104]
- Plan a field storage layout. [101-520-4153]

DS FA Bn SO
[STP 21-II-MQSs]
- Solve problems using the military problem-solving process. [03-9001.13-0001]

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6-20-40	Fire Support for Brigade Operations (Heavy), January 1990
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6-40	Field Artillery Manual Cannon Gunnery, 23 April 1996
6-50	Tactics, Techniques and Procedures for The Field Artillery Cannon Battery, with C-1, August 1992
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34-130	Intelligence Preparation of the Battlefield, July 1994
63-20	Forward Support Battalion, February 1990
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71-3-MTP	MTP for the Heavy Brigade Command Group and Staff, October 1988

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6-13II-MQS	Military Qualification Standards II Field Artillery Branch (13) Company Grade Officer's Manual, March 1991
6-13B24-SM-TG	Soldier's Manual and Trainer's Guide, MOS 13B, Cannon Crew Member, Skill Levels 2-3-4, 13 September 1993
6-13F14-SM-TG	Soldier's Manual, Skill Levels 1-2-3-4, and Trainer's Guide, MOS 13F, Fire Support, Specialist, 24 September 1993
9-91BCII-MQS	Military Qualification Standards II, Ordinance Branch (91BC), Company Grade Officers Manual, March 1991
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Appendix A

INDEX of
BRIGADE COMBAT TEAM BATTLEFIELD FUNCTIONS
Grouped By Battlefield Operating System (BOS)

This component lists the thirty-nine (39) battlefield functions (BFs) for each battlefield operating system (BOS) which have been identified as relevant to U.S. Army tactical echelon units. These BFs were identified based on an analysis of Training and Doctrine Command (TRADOC) Pamphlet 11-9, "Blueprint of the Battlefield." The purpose of this component is to depict the BOS and the BF which define each BOS.

INTELLIGENCE	(1)	Conduct intelligence planning.
	(2)	Collect information.
	(3)	Process information.
	(4)	Disseminate intelligence.
MANEUVER	(5)	Conduct tactical movement.
	(6)	Engage enemy with direct fire and maneuver.
AIR DEFENSE	(16)	Take active air defense measures.
	(17)	Take passive air defense measures.
FIRE SUPPORT	(7)	Employ mortars.
	(8)	Employ field artillery.
	(9)	Employ close air support.
	(10)	Conduct electronic collection and electronic attack.
	(11)	Conduct battlefield psychological operations.
	(12)	~~Employ chemical weapons.~~[1]
	(13)	Conduct counter target acquisition operations.
	(14)	Employ naval surface fires.
	(15)	Coordinate, synchronize and integrate fire support.
MOBILITY AND SURVIVABILITY	(21)	Overcome obstacles.
	(22)	Enhance movement.
	(23)	Provide countermobility.
	(24)	Enhance physical protection.
	(25)	Provide operations security.
	(26)	Conduct deception operations.
	(27)	Provide NBC defense.

[1] Although U.S. national policy has renounced the use of chemical weapons, this BF is retained because it is a function which might be performed by other nations.

COMMAND AND CONTROL	(18)	Plan for combat operations.
	(19)	Direct and lead unit during preparation for the battle.
	(20)	Direct and lead units in execution of battle.
COMBAT SERVICE SUPPORT	(28)	Provide transport services.
	(29)	Conduct supply operations.
	(30)	Provide personnel services.
	(31)	Maintain weapons systems and equipment.
	(32)	Provide health services.
	(33)	Treat and evacuate battlefield casualties.
	(34)	Conduct enemy prisoners of war (EPW) operations.
	(35)	Conduct law and order operations.
	(36)	Conduct civil affairs operations.
	(37)	Provide sustainment engineering.
	(38)	Evacuate non-combatants from area of operations.
	(39)	Provide field services.

Appendix B

STRUCTURE OF BATTLEFIELD FUNCTIONS (BFs) RELEVANT TO BRIGADE OPERATIONS

This component provides a description of each BF and the battlefield operating system (BOS) with which it is aligned. Included with each BF definition is a listing of major doctrinal topics and aspects addressed by the BF. These definitions provide the necessary framework required to understand the focus of each BF. Under most circumstances, heavy brigades will be involved in the accomplishment of some or all aspects of the BF. The involvement can vary from extensive, wherein the BF is a major focus, to minor, wherein the brigade headquarters only furnishes information. In the latter instances, the involvement may not be sufficient to warrant incorporation into a brigade's training program, although the brigade's responsibilities for the function are likely addressed in its SOP for tactical operations. The BF definitions were extrapolated from TRADOC Pam 350-7 "Blueprint of the Battlefield," as well as other doctrinal publications relevant to the applicable BF or BOS.

1. **Intelligence BOS** - The ways and means of acquiring, analyzing, and using knowledge of the enemy, weather, and terrain required by a commander in planning, preparing, and conducting combat operations. These BFs are continuous throughout the planning, preparation, and execution phases of the battle.

    a. **BF (1) Conduct Intelligence Planning** - The developing and coordinating of information relative to the enemy, weather, and terrain prior to and during the development of the unit operations order OPORD; the planning to collect information from battlefield sources and to acquire intelligence from other headquarters. Focus of this BF is the intelligence preparation of the battlefield (IPB). This BF addresses:

        1) Reconnaissance and surveillance plan (R&S Plan).

        2) Integrated threat templates (e.g., doctrinal, event, input to DST).

        3) Terrain and weather analysis.

    b. **BF (2) Collect Information** - Obtaining information in any manner from the heavy brigade's elements and from sources outside the heavy brigade (e.g., higher headquarters and adjacent units). This BF includes the tasks associated with managing the processes and activities necessary to collect battlefield information which may eventually be used to provide intelligence relative to the enemy, terrain, and weather. This BF addresses:

        1) Information collected as a result of the R&S Plan.

        2) Continuous information collection and acquisition from all sources.

c. **BF (3) Process Information** - Converting information into intelligence through collation, evaluation, analysis, integration, and interpretation in a continual process. This BF addresses:

1) Evaluation of threat information.

2) Evaluation of physical environment information.

3) Integration of intelligence information.

4) Development of enemy intentions.

5) Development of targeting information.

6) Preparation of intelligence reports.

7) Update of situational template.

8) Provision of battlefield area reports.

d. **BF (4) Disseminate Intelligence** - Transmitting of information by any means (verbal, written, electronic, etc.), from one person or place to another to provide timely dissemination of critical intelligence to all appropriate members of the combined arms team. This BF addresses:

1) The sending of processed intelligence in a timely manner to those on the combined arms team who can, by its receipt, take appropriate actions to accomplish the mission. This includes intelligence on the enemy, terrain, and weather.

2) The sending of raw intelligence directly from those responsible for reconnaissance and surveillance to the commander should that raw intelligence be time sensitive (and not be subject to receipt and processing by intelligence analysts).

3) Dissemination of battlefield reports.

2. **Maneuver BOS** - The employment of direct fire weapons, platforms, and systems through movement and fire and maneuver to achieve a position of advantage in respect to enemy ground forces, in order to accomplish the mission. The direct fire weapons are tank guns, Bradley Fighting Vehicle (BFV) 25mm, anti-tank guns and rockets, attack helicopter guns and rockets, small arms, crew-served weapons, and directed energy weapons systems.

a. **BF (5) Conduct Tactical Movement** - Planning for and directing the positioning of direct fire weapons systems relative to the enemy to secure or retain positional advantage, making full use of terrain and formations. Tactical movement occurs when

contact with the enemy is likely or imminent but direct fire engagement has not yet occurred. Units supporting maneuver units are included. This BF addresses:

1) Subordinate element OPORD preparation and dissemination.

2) Preparation for movement.

3) Movement, both mounted and dismounted, and on and off road.

4) Closure of movement to tactical assembly area or tactical positions.

5) Navigation.

6) Air movement.

b. **BF (6) Engage Enemy with Direct Fire and Maneuver** - Planning for and directing elements in ground combat with the enemy using direct fire and/or close combat in order to destroy the enemy or cause him to withdraw. This BF relates only to those direct fire weapons systems associated with the maneuver BOS. This BF addresses:

1) Preparation of engagement areas.

2) Rehearsals of battle plans.

3) Prevention of fratricide.

4) Conduct of close combat.

5) Integration of direct fire with maneuver.

6) Control of terrain.

7) Consolidation and reorganization.

3. **Fire Support BOS** - The collective, coordinated, and synchronized use of target acquisition data, indirect fire weapons, armed aircraft (less attack helicopters) and other lethal and non-lethal means against ground targets in support of maneuver force operations and to achieve the commander's intent and scheme of maneuver. The fire support BOS addresses these weapons: mortars, field artillery, close air support, electronic measures, and naval surface fires.

a. **BF (7) Employ Mortars** - Planning for and employment of mortars by the maneuver unit to place fires on the enemy or terrain to support the commander's concept and intent.

b. **BF (8) Employ Field Artillery** - Planning for and directing of indirect artillery fires to be placed on the enemy or terrain to support the commander's concept and intent. The fire support coordination tasks necessary to integrate the field artillery and the maneuver units are the primary focus. This BF does not address those field artillery tasks associated directly with those actions taken by the batteries of the artillery battalion in the conduct of their support mission such as FDC operations, gun operations, etc. This BF addresses:

   1) Fire support - maneuver unit rehearsals.

   2) FSE operations during the preparation and execution phases of the battle.

   3) Positioning and movement within the maneuver unit sector or zone.

   4) Indirect fire missions in support of maneuver commander's concept and intent.

c. **BF (9) Employ Close Air Support** - Planning for, requesting, and employing armed aircraft (less attack helicopters) in coordination with other fire support (lethal and non-lethal) against ground targets in support of the brigade commander's concept and intent. This BF addresses:

   1) Air-ground attack requests.

   2) Air space coordination and management.

   3) Air liaison officer, forward air controller; other Army fire support coordination officers, United States Navy (USN)/United States Marine Corps (USMC) brigade team commander, supporting arms liaison team (SALT) and firepower control team (FCT) tasks that enable air-to-ground attacks.

d. **BF (10) Conduct Electronic Collection and Jamming**[1] - Planning for and directing actions taken to deny the enemy effective command, control, and communications of his own tactical force in support of maneuver commander's concept and intent. This BF includes jamming, deception, and collection.

e. **BF (11) Conduct Battlefield Psychological Operations** - Planning for and directing the conduct or support of psychological operations (when psychological operations units are available) as an integral part of combat operations to bring psychological pressure to bear on enemy forces and civilians under enemy control in the battle area, to assist in the achievement of tactical objectives in support of the brigade commander's concept and intent.

[1] Title and structure change to "Conduct electronic collection and electronic attack" are presently under consideration.

f. ~~**BF (12) Employ Chemical Weapons**~~[2] - Employing chemical agents or other means to degrade enemy capabilities in support of the brigade commander's concept and intent.

g. **BF (13) Conduct Counter Target Acquisition Operations** - Planning for and directing the suppression (e.g., using smoke or dazzling illumination) to degrade enemy direct observation, optics, radar, sensors, electronic direction finding (DF) equipment, and imaging systems in support of the commander's concept and intent.

h. **BF (14) Employ Naval Surface Fires** - Planning for and directing naval gunfire in support of the maneuver commander's concept and intent.

i. **BF (15) Coordinate, Synchronize, and Integrate Fire Support** - Coordinating all fire support means in support of the maneuver commanders' concepts and intents. The BF integrates BF 7-14.

4. **Air Defense BOS** - The means and measures organic or assigned to the maneuver commander which, when employed successfully, will nullify or reduce the effectiveness of attack by hostile aircraft or missiles after they are airborne.

a. **BF (16) Take Active Air Defense Measures** - Planning for and directing the application of firepower to destroy enemy air targets. This BF encompasses the coordinating tasks which enable the commander to successfully employ any attached or assigned air defense weapons system, as well as the tasks necessary to employ all organic weapons systems against enemy air targets. This BF addresses:

1) Employment of air defense artillery guns and missiles.

2) Employment of maneuver unit weapons systems such as small arms, automatic weapons, BFV 25 mm and tube launched, optically tracked, wire-guided missiles (TOWs), and tank main gun against enemy air.

3) Airspace management.

4) Early warning.

b. **BF (17) Take Passive Air Defense Measures** - Planning for and directing the protection of the unit from enemy air by means other than weapons. This BF addresses:

1) Early warning.

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[2] Although U.S. national policy has renounced the use of chemical weapons, this BF is retained because it is a function which might be performed by other nations.

2) Dispersion.

3) Deception.

5. **Command and Control BOS** - The ways and means a commander exercises authority and direction over organic and assigned combat power in the accomplishment of the mission.

a. **BF (18) Plan for Combat Operations** - The integration of all members of the unit in the coordinated development of an operations order which will guide the activities of the unit in conducting combat operations to accomplish assigned missions. The product/outcome of this BF is a briefed, understood OPORD. This BF addresses:

1) Receipt and analysis of higher HQ OPORD.

2) Issuance of warning order.

3) Restated mission statement.

4) Commander's estimate process/troop leading procedures.

5) Commander's guidance.

6) Mission analysis (includes course of action development).

7) Decision brief to commander.

8) Development of a synchronized OPORD.

9) Reproduction and distribution of OPORD to all participants.

10) Briefing of OPORD; understanding of order by participants.

11) FRAGO planning and issue.

b. **BF (19) Direct and Lead Unit during Preparation for the Battle** - The ways and means to prepare the unit so that it is ready to support the commander's concept and intent. This BF addresses:

1) Commander's actions and decisions.

2) Directing preparation for the battle.

3) Issuing orders.

4) Communicating information.

5) Confirmation briefs and backbriefs.

6) Rehearsals.

7) Maintaining and updating information and force status.

8) Decisions to act or change ongoing actions.

9) Confirming IPB through the reconnaissance effort.

10) Determining actions to implement decisions.

11) Synchronizing preparation (e.g., management of time).

12) TOC operations (e.g., staff integration).

13) Second in command (2IC) responsibilities.

14) Continuous and sustained operations.

15) Communications (e.g., planning, installation and operation of system, management, site election).

c. **BF (20) Direct and Lead Units in Execution of Battle** - The ways and means to command and control the unit's execution of the battle plan to accomplish the commander's concept and intent. This BF addresses:

1) Commander's actions and decisions.

2) Directing the conduct of the battle.

3) Issuing orders.

4) Information distribution.

5) Synchronizing tactical operations (e.g., use of DST).

6) TOC operations (includes CP displacement, security, survivability, battle tracking).

7) Continuity of command (e.g., C2 redundancy).

8) Second in command (2IC) responsibilities.

9) Continuous and sustained operations.

10) Consolidation and reorganization.

6. **Mobility and Survivability BOS** - The ways and means that permit freedom of movement, relative to the enemy, while retaining the force's ability to fulfill its primary mission, as well as the measures the force takes to remain viable and functional by protection from the effects of enemy weapons systems and natural occurrences.

a. **BF (21) Overcome Obstacles** - Planning for and directing actions to remove or clear/reduce natural and man-made obstacles.

b. **BF (22) Enhance movement** - Planning for and coordinating elements providing mobility for the unit in its area of operations. This BF addresses:

1) Construction and repair of combat roads and trails.*

2) Facilitating movement on routes. (This includes control of road traffic and control of refugees and stragglers.)*

3) Tracking status of routes.*

4) Host nation support.*

c. **BF (23) Provide Countermobility** - Planning for and directing actions to delay, channel, or stop enemy offensive movement consistent with the commander's concept and intent by enhancing the effectiveness of friendly direct and indirect weapons systems.

d. **BF (24) Enhance Physical Protection** - Planning for and directing actions that provide protection of friendly forces on the battlefield by enhancing the physical protection of personnel, equipment and weapons systems, and supplies.

e. **BF (25) Provide Operations Security** - Planning for and directing action to deny information to the enemy about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with planning and conducting military operations. This BF addresses:

1) Analysis to determine key assets and threats to them.

2) Monitoring of implementation of OPSEC measures.

* Normally accomplished by units supporting the division.

3) Physical security measures.

4) Signal security.

5) Electronic security.

f. **BF (26) Conduct Deception Operations** - Taking actions in accordance with the division's or corps' deception plan to mask the objectives of tactical operations in order to delay effective enemy reaction. This BF addresses:

1) Physical deception.

2) Electronic deception.

g. **BF (27) Provide NBC Defense** - The avoidance of contamination; the protection of people, objects or areas from chemical or biological agents by absorbing, destroying, neutralizing, or otherwise rendering harmless or removing such agents; and the removal of radioactive material. This BF addresses:

1) Decontamination of individual soldiers and equipment.

2) Decontamination of weapon systems and supplies.

3) Hasty and deliberate decontamination.

4) Avoidance of contaminated areas.

5) NBC reconnaissance.

6) NBC defensive measures.

7) NBC warning.

7. **Combat Service Support BOS** - The support, assistance, and service provided to sustain forces, primarily in the area of logistics, personnel services, and health services.

a. **BF (28) Provide Transport Services** - Planning for and directing provision or coordination for transportation which will assure sustainment support operations in support of the unit. This BF addresses:

1) Movement of cargo, equipment, and personnel by surface or air.

2) Loading, transloading, and unloading material and supplies.

3) Reporting status.

b. **BF (29) Conduct Supply Operations** - Planning for and directing provision of the items necessary to equip, maintain, and operate the force during the preparation and execution phases of the battle. This BF addresses:

   1) Requesting, receiving, procuring, storing, protecting, relocating, and issuing supplies to the specific elements of the force.

   2) Providing munitions to weapons systems.

   3) Providing fuel and petroleum products to equipment and weapons systems.

   4) Reporting status.

c. **BF (30) Provide Personnel Services** - Planning for and directing all personnel-related matters to sustain the force. This BF addresses:

   1) Personnel administrative services.

      a) Replacement, casualty reporting.

      b) Awards and decorations.

      c) Postal operations.

      d) Promotions, reductions.

   2) Financial services.

   3) Unit ministry team operations.

   4) Legal services.

   5) Public affairs services.

   6) Preservation of the force through safety.

   7) Management of stress.

   8) Reporting status.

d. **BF (31) Maintain Weapons Systems and Equipment** - Planning for and directing preservation and repair of weapons systems and equipment. This BF includes the provision of repair parts and end items to all members of the unit before, during and

after the battle. Included also is doctrinal echeloning of maintenance (organization, DS, GS). This BF addresses:

1) Recovery.

2) Diagnosis, substitution, exchange, repair and return of equipment and weapons systems to the combined arms force.

3) Reporting status.

e. **BF (32) Provide Health Services** -Planning for, directing and coordinating health services regardless of location, to promote, improve, conserve or restore the mental or physical well-being of individuals or groups. This BF addresses:

1) Preventive medicine.

2) Field sanitation.

3) Mental health.

f. **BF (33) Treat and Evacuate Battlefield Casualties** - Planning for and directing the application of medical procedures on battlefield casualties beginning with "buddy aid" through treatment by trained medical personnel. The BF includes movement of casualties from the forward edge of the battlefield back to division-level medical facilities. This BF addresses:

1) Triage of battlefield casualties.

2) Treatment and movement of casualties to rear (MEDEVAC).

3) Evacuation.

4) Handling and processing the remains of soldiers who have died of wounds.

5) Reporting status.

g. **BF (34) Conduct Enemy Prisoners of War (EPW) Operations** - Planning for and directing the collection, processing, evacuation, and safeguarding of enemy prisoners of war. This BF addresses:

1) Collecting and evacuating EPW.

2) Searching, segregating, safeguarding, silencing, and rapid rearward movement of EPW.

h. **BF (35) Conduct Law and Order Operations** - Enforcing laws and regulations and maintaining of unit and personnel discipline.

i. **BF (36) Conduct Civil Affairs Operations** - Planning for, directing, and/or coordinating assigned tasks to conduct activities which encompass the relationship between the military forces and civil authorities and the citizens in a friendly or occupied country or area when U.S. military forces are present.

j. **BF (37) Provide Sustainment Engineering** - Planning for and coordinating the actions of elements (when in the unit area), providing repair and construction of facilities and lines of communication. This BF addresses:

   1) Rear area restoration.*

   2) Construction and maintenance of lines of communication (roads, railroads, ports, airfields).*

   3) Construction support:

      a) Marshaling, distribution and storage facilities.*

      b) Pipelines.*

      c) Fixed facilities.*

      d) Well drilling.*

      e) Dismantlement of fortifications.*

k. **BF (38) Evacuate Non-combatants from Area of Operations** - Planning for and directing the unit's participation in actions to use available military and host-nation resources for the evacuation of U.S. forces, dependents, U.S. government civilian employees, and private citizens (U.S. and other). This BF addresses:

   1) Medical support.

   2) Transportation.

   3) Security.

   4) Preparation of temporary shelters.

* Normally accomplished by units supporting the division.

5) Operation of clothing exchange facilities.

6) Operation of bathing facilities.

7) Graves registration.

8) Laundry.

9) Feeding.

l. **BF (39) Provide Field Services** - Planning for and coordinating the provision of service logistics functions by CSS elements*. This BF addresses:

1) Clothing exchange.

2) Shower facilities.

3) Graves registration.

4) Laundry and clothes renovation.

5) Bakeries.

6) Feeding (rations supply, kitchens).

7) Salvage.

* Normally accomplished by units supporting the division.

Appendix C

BFs LISTED BY ECHELON

This component depicts the identification of BFs to the echelon/type unit based on previous research and analysis.

INTELLIGENCE BOS		Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry
(1)	Conduct Intelligence Planning	X	X	X	X	X	
(2)	Collect Information	X	X	X	X	X	X
(3)	Process Information	X	X	X	X	X	X
(4)	Disseminate Information	X	X	X	X	X	X

MANEUVER BOS		Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry
(5)	Conduct Tactical Movement	X	X	X	X	X	X
(6)	Engage the Enemy with Direct Fire and Maneuver	X	X[1]				

FIRE SUPPORT BOS		Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry
(7)	Employ Mortars	X	X				
(8)	Employ Field Artillery	X	X	X	X	X	X
(9)	Employ Close Air Support	X	X				

[1] BF 6, as defined, concerns how units will engage the enemy through maneuver and direct fires. The function is performed by the element directly controlling the direct fire systems. Initial analysis indicates that this is accomplished by maneuver battalions, such as a mechanized infantry or armor Bn TF, and attack helicopter battalions. The brigade commander and brigade staff's involvement in the engagement of the enemy is through direction of the subordinate battalions. Hence, the brigade's control is not direct to the systems involved. Therefore, the brigade involvement is described within the context of BF 18, 19, and 20. Further analysis is required.

FIRE SUPPORT BOS (cont.)		Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry
(10)	Conduct Electronic Collection and Jamming[2]						
(11)	Conduct Battlefield Psychological Operations						
~~(12)~~	~~Employ Chemical Weapons~~ [3]						
(13)	Conduct Counter Target Acquisition Operations			X			
(14)	Employ Naval Surface Fires	X	X				
(15)	Coordinate, Synchronize, and Integrate Fire Support	X	X	X	X	X	

AIR DEFENSE BOS		Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry
(16)	Take Active Air Defense Measures	X	X				X
(17)	Take Passive Air Defense Measures	X	X	X	X	X	X

COMMAND AND CONTROL BOS		Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry[4]
(18)	Plan for Combat Operations	X	X	X	X	X	
(19)	Direct and Lead Units During Preparation for Battle	X	X	X	X	X	
(20)	Direct and Lead Units in Execution of Battle	X	X	X	X	X	

[2] Title and focus change to "Conduct electronic collection and electronic attack" are presently under consideration.
[3] Although U.S. national policy has renounced the use of chemical weapons, this BF is retained because it is a function which could be performed by other nations.
[4] The battle phases of plan, prepare, and execute are inherent to the ADA battery's performance of BF 16, Take Active Air Defense Measures.

MOBILITY AND SURVIVABILITY BOS	Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry
(21) Overcome Obstacles	X	X		X		
(22) Enhance Movement				X		
(23) Provide Countermobility	X	X		X		
(24) Enhance Physical Protection	X	X	X	X	X	X
(25) Provide Operations Security	X	X	X	X	X	X
(26) Conduct Deception Operations						
(27) Provide NBC Defense	X	X	X	X	X	X

COMBAT SERVICE SUPPORT BOS	Bn TF	Bde	FA Bn	Engr Bn	FS Bn	ADA Btry
(28) Provide Transport Services	X	X	X	X	X	
(29) Conduct Supply Operations	X	X	X	X	X	X
(30) Provide Personnel Services	X	X	X	X	X	
(31) Maintain Weapons Systems and Equipment	X	X	X	X	X	X
(32) Provide Health Services		X			X	
(33) Treat and Evacuate Battlefield Casualties	X	X	X	X	X	X
(34) Conduct Enemy Prisoner of War Operations		X			X	
(35) Conduct Law and Order Operations						
(36) Conduct Civil Affairs Operations						
(37) Provide Sustainment Engineering						
(38) Evacuate Non-combatants from Area of Operations						
(39) Provide Field Services					X	

Appendix D

USER'S GUIDE

This component is designed to facilitate use of the function analysis. The examples are based on the function analysis (FA) of BF 18--Plan for Combat Operations--as performed by the heavy brigade.

Section 1 - Background on Functional Approach to Training and Battlefield Functions

Given the task-based nature of Army training, the tools for identifying, structuring, and organizing tasks critical for combat effectiveness are essential to realizing goals of Army training for the 21st century. Providing such tools has been a persistent effort in structuring assessment and planning of collective training. Army Training and Evaluation Program Mission Training Plans (ARTEP-MTPs), which list tasks by mission, represent one approach to provide that structure. A complementary approach has emerged in the use of functional areas.

Several initiatives have considered tasks in relation to functional areas rather than missions. One such approach was adopted at the Combat Training Centers (CTCs). The specific approach developed in the mid-1970s used Battlefield Operating Systems (BOSs) as the framework for after action reviews (AARs) and take home packages. The BOSs are seven functional areas which encompass tactical operations.

In addition, to enhance the utility of the BOS structure, the U.S. Army Training and Doctrine Command (TRADOC) developed the Blueprint of the Battlefield. That work used the BOS structure as a framework to describe the tactical level of war in terms of operating systems, functions, and generic tasks. While the functional hierarchy in the Blueprint of the Battlefield provided finer granularity than the BOS, the Blueprint of the Battlefield did not represent battlefield processes, critical sequences of events, procedural steps, and many of the tasks that must be accomplished.

This research product is part of an effort to improve further the functional structure for planning and assessing collective training through the identification and analysis of Battlefield Functions (BFs). Like the Blueprint of the Battlefield, the BFs orient on functions (activities and processes that occur over time) while retaining granularity that supports task-based training. The BF analyses extend the Blueprint of the Battlefield in two ways:

- Identify relationships among BOSs, tasks, echelons, and people required to achieve identified outcomes, thus improving representation of battlefield processes and sequences of events.
- Provide explicit ties to tasks derived from ARTEP-MTPs and doctrine, tactics, techniques, and procedures described in doctrinal manuals, applied at CTCs, or identified by experienced field commanders, thus improving representation of procedural steps and tasks that must be accomplished.

The FAs of BFs have been conducted at a level of detail that supports a functional approach to training. The functional approach uses battlefield functions performed by units as the basis for assessing proficiency and planning training. The BF FAs provide content and a framework to apply the functional approach to training. Thirty-nine (39) BFs (Appendix A) are relevant to tactical operations at echelons from battalion through corps. Association of specific BFs to particular type units indicates that those BFs are germane to the unit's training program.

Section 2 - Overview of Components to a BF Function Analysis

The BF FA conducted as part of this project (Innovative Tools and Techniques for Brigade and Below Staff Training (ITTBBST)) contains seventeen (17) components including this User's Guide. The components allow BF FA users the capability to use the BF FA for a variety of purposes, some of which are described in Section 3 below. The title and a brief description of each BF FA component follow.

Overview: Information is provided concerning the presentation of the BF FA components, the table of organization and equipment (TO&E) of the type unit for which the BF FA is relevant, and the context in which the FA was developed. The information provides an overview of the analytical approach used for the FA.

Purpose and Outcomes: The overall end result which the BF is supposed to accomplish, termed the purpose, is identified. This component also identifies the endstates or bottom line results necessary to achieve the purpose, termed outcomes.

Flow Charts by Battle Phase (Plan, Prepare, Execute): This graphical description portrays the sequence of BF tasks within the framework of tactical battle phases (i.e., planning, preparation, execution). This component describes the flow of tasks during each battle phase, the vertical task linkages (to higher and lower echelon units), and horizontal linkages to other BFs for the echelon being analyzed. It also depicts information flow which affects the tasks.

Task Linkages to Other BFs/Units: Tasks performed in other BFs or by other units are described as they relate (i.e., are linked) to the tasks of the BF being analyzed. These descriptions provide verbal details of the relationships portrayed graphically by the Flow Charts. The purpose of this component is to allow the user to incorporate related tasks and participants into a training exercise for this BF. Tasks which link to this analysis have been extracted for BFs or units for which FAs have been accomplished and extrapolated for FAs which have not yet been developed.

Key Participants by Task: The participants required to perform the tasks are identified. Identification is based on the appropriate echelon/type unit TO&E. It includes special staff members who are critical for task accomplishment.

Key Inputs and Outputs: The critical information required and generated by participants to successfully accomplish the BF is identified. Where information results from the performance of the BF tasks, BF information output is identified. One BF's information output normally is provided as another BF's input. Critical input and output are organized by the specific part of the doctrinal product or means used to communicate it. The source of critical information is specific only to the BF echelon and function being analyzed, and is not intended to reflect all the information the product may contain. The linkages of inputs and outputs to specific tasks are depicted in the Flow Charts component.

Task List Summary: The tasks which are described in detail in the Task List are summarized and numbered. The numbers allow cross referencing among BF FA components.

Task Lists: Tasks and supporting tasks necessary to perform the function are listed by battle phase. Normally, the task identifies the primary participants responsible for performing the tasks. The tasks have been extracted from the appropriate ARTEP-MTPs, echelon and functional area field manuals (FMs), and proponent school special texts. The specific sources of references for each task and subtask are shown in brackets [ ] following the task. Tasks derived from ARTEP-MTPs are referenced with the ARTEP-MTP number and task number, such as [ARTEP 5-145-MTP, Task 05-1-0002/1]. Tasks derived from FMs are referenced with the FM number and page number, such as [FM 5-71-3, p. 2-11]. Tasks identified during interviews with TRADOC school proponent subject matter experts (SMEs), CTC Operations Groups, and Army Forces Command units are referenced as field notes (FN) and the source is reflected, such as [FN-NTC CSS OCs]. Tasks derived from the Center for Army Lessons Learned (CALL) are referenced with the notation LL for lessons learned; the CALL publication number and page number are included, such as [LL-CALL Newsletter 95-6, p. 16]. In some cases, the analysis of the BF resulted in identification of tasks for which no doctrinal references could be identified. Such tasks were selected based on author experience and relevant doctrine. These tasks are referenced as author notes [AN]. The references facilitate review of original source material for further detail and context.

Tasks Organized by Outcomes: Tasks and supporting tasks necessary to perform the function are listed by outcome. The component supports analysis of performance related to outcomes to identify tasks for sustainment or remediation training.

Lessons Learned Integrated into the Task List: The lessons learned extracted from the CALL publications relevant to performing this BF are identified. They are organized and listed by the appropriate task from the Task List component. The purpose of this component is to provide the user with recent tactics, techniques, and procedures (TTP) associated with the performance of the tasks in this BF.

Gate Tasks: Critical individual or collective tasks which BF participants must be able to perform prior to engaging in the identified BF tasks are listed so that the training can be conducted efficiently and safely.

References: The references and sources used by the analyst are identified.

Index of Battlefield Functions: The thirty-nine (39) BFs relevant to Army tactical echelon units, organized by the BOS they compose, as derived from TRADOC Pamphlet 11-9, Blueprint of the Battlefield, are identified.

Structure of Battlefield Functions: Definitions for the 39 BFs and BOSs they compose are provided.

BFs Listed by Echelon: The occurrences of BFs relevant to training according to echelon/type units are listed. This list is subject to change as research into the relevance of functions continues.

User's Guide: Descriptions are provided of the background of BFs and the Functional Approach to training (Section 1), the components of a BF FA (in this section), and approaches to exploit the flexibility of the BF FA to support multiple Army uses and users (Section 3).

Acronyms and Abbreviations: The acronyms and abbreviations used in the analysis are listed. The acronyms and abbreviations were taken from relevant doctrinal references.

Section 3 - Use of the BF Function Analysis

The analysis of a function contained in each BF FA can support a variety of purposes. General purposes and information needs will be suggested for force developers, materiel developers, doctrine developers, training developers, and unit commanders.

- Force Developers: Develop personnel systems and organizational structures to support the force. Purpose and Outcomes and Task Lists components, for example, could support identification of required capabilities and tasks that a particular unit or organization must be able to perform. The Flow Charts component could support delineation of a new organizational design.

- Materiel Developers: Develop requirements for new systems to ease performance activities of soldiers and to accomplish new battlefield requirements. Through the identification of requirements, new technologies and processes can be applied to support force needs. The Flow Charts component, for example, could be used to illustrate opportunities to revise procedures to take advantage of enhancements in areas such as information dissemination.

- Doctrine Developers: Develop new and modify existing doctrine to integrate emerging technologies and to implement changing Army missions and priorities. TTP will evolve to meet new battlefield conditions and requirements as well as to guide combined arms, joint service, and multinational operations. The emphasis in BF FAs on interrelationships can identify gaps in task coverage which should be addressed through revisions to publications such as ARTEP-MTPs.

- Training Developers: Develop new and modify existing training programs to support new doctrine, emerging technologies, changes in organization, and reduced resources and training environments. Potential uses of a BF FA to support areas such as development of training support packages (TSP) and development of training aids, devices, simulators, and simulations (TADSS) are discussed in Section 4.

- Unit Commanders: Assess training effectiveness, develop training plans, and execute training. BF FA support for training assessment and planning training events is discussed in Section 4.

Developers and commanders often begin by performing or examining one or more front end analyses (FEAs) to gain an understanding of a relevant issue. Whether they perform FEAs themselves or draw from available analyses (like the BF FAs), information is sought on many topics. Likely topics include the following (with relevant BF FA components):

- What are the objectives/missions of the system? (Purpose and Outcomes)

- What are the vertical and horizontal linkages between elements, and what are the information inputs and outputs associated with these? (Flow Charts, Tasks Linked to Other BFs/Units, and Key Inputs and Outputs)

- What are the processes and tasks being performed within each element? (Task Lists, Tasks Organized by Outcomes, and Flow Charts)

- Who are the players and/or target audience? (Key Participants by Task)

- What enabling and objective knowledge and skills are required? (Gate Tasks)

- Are there any experiences and lessons learned that would be helpful? (Task Lists and Lessons Learned Integrated into the Task List)

Two detailed examples of BF FA usage are presented in Section 4 below. These examples demonstrate, first, how unit commanders and, second, how training developers can use BF FAs. The examples should serve as a guide for potential BF FA users in that generic information within the BF FAs is transferable to the other applications.

Section 4 - Unit Commander and Training Developer Use of a BF Task Analysis

Unit Commanders

Unit commanders use published Army doctrine as contained in FM 25-100, Training the Force (November 1988), and FM 25-101, Battle Focused Training (September 1990) to assess training effectiveness and to plan training events. The BF FAs provide relevant information for assessment and planning within the intent of those documents. The added information supports functional training which uses proficiency related to functions as the basis for identifying tasks to be trained and structuring training on those tasks. The BF FAs supplement the training and assessment systems and processes already in use by commanders.

1. Conduct Training Assessment

The commander assesses the mission essential task list (METL) to identify functions that require attention, to select outcomes for training focus, and to provide specific guidance for training. This functional training assessment allows the commander to perform an analysis across several layers with a successively narrow focus:

a. METL tasks.

b. Each BOS for each METL task that requires remediation or sustainment.

c. Relevant BFs for each BOS that requires remediation or sustainment.

d. Relevant outcomes for each BF that requires remediation or sustainment.

The commander assesses BF performance in the context of the unit METL and the BOS by using the Purpose and Outcomes component. To support the assessment, commanders could develop and complete a worksheet which relates BFs and the outcomes to the METL and BOS, as depicted in Figure D-1, which presents a completed assessment worksheet for BF 18.

BF 18 Outcomes (extracted from the function analysis):

1. Complete, concise, feasible, suitable, acceptable, and tactically sound brigade orders that conform to doctrinal standards are issued.
2. Brigade orders are received in no more than 1/3 of the available time and understood by key participants and subordinates.
3. Sufficient hard copies of the brigade order and all key accompanying documents are provided to key personnel in accordance with TSOP.
4. Brigade operations, command, and control continue during planning process.

<table>
<tr><td rowspan="4">Mission Essential Tasks</td><td colspan="5">CURRENT TRAINING STATUS</td><td>Overall METL Status</td></tr>
<tr><td colspan="5">BOS: Command and Control</td><td></td></tr>
<tr><td colspan="5">BF: 18- Plan for Combat Operations</td><td></td></tr>
<tr><td>Outcomes</td><td>1</td><td>2</td><td>3</td><td>4</td><td></td></tr>
<tr><td>Defend</td><td></td><td>P</td><td>P</td><td>T</td><td>P</td><td>P</td></tr>
<tr><td></td><td colspan="6"><u>Outcome 1</u>: OPORD generally very good; need more detail on control measures (excessive risk of fratricide).
<u>Outcome 2</u>: Too slow getting information to supporting battalions--FSB especially needs support requirements earlier.
<u>Outcome 3</u>: Dissemination is very smooth.
<u>Outcome 4</u>: Weak communications between main CP and adjacent units.</td></tr>
<tr><td rowspan="2">Attack; Movement to Contact</td><td></td><td>P</td><td>U</td><td>T</td><td>P</td><td>P</td></tr>
<tr><td colspan="6"><u>Outcome 1</u>: Accuracy of graphics questionable--MCOO inaccurate or unclear--not sure which, may be both.
<u>Outcome 2</u>: Adjacent units never received initial WARNO.
<u>Outcome 3</u>: OPORD distribution continued to be a strength.
<u>Outcome 4</u>: Rear CP: situation map (SITMAP) and information displays of tactical situation were not current.</td></tr>
<tr><td colspan="4">Overall BF Status: BF 18 = P</td><td colspan="3">BOS Status = P</td></tr>
</table>

Note: Italics indicate entries made by hypothetical commander.

Figure D-1. Assessment worksheet for heavy brigade performance of BF 18.

2. Plan Training Events

The BF FA supports four steps related to planning a training event. The use of BF FAs to perform each of these tasks is described below.

a. Selecting Tasks and Supporting Tasks To Be Trained

1) Selection of tasks by outcome or battle phase. When the training assessment identifies outcomes to be achieved, trainers can focus their attention on particular tasks that support the outcome. This process can be streamlined by referring to the Tasks Organized by Outcomes component of a BF FA. The tasks relevant to each outcomes for the BF 18 FA are shown in Figure D-2. While many of the tasks are required by more than one outcome, the supporting tasks will usually vary between the outcomes.

If trainers have no basis for identifying an outcome within the BF or if the training is to focus on a single battle phase, they can select tasks from the Task List Summary component. For most BFs, this component is organized by the battle phases--plan, prepare, and execute--supported by the Flow Chart. The exceptions to that organization are BFs 1 through 4, which cover the Intelligence BOS, and BFs 18 through 20, which cover the command and control BOS by battle phase. The Intelligence BFs reflect the continuous nature of the intelligence cycle.

BF 18 Outcomes (OC):

1. Complete, concise, feasible, suitable, acceptable, and tactically sound brigade orders that conform to doctrinal standards are issued.
2. Brigade orders are received in no more than 1/3 of the available time and understood by key participants and subordinates.
3. Sufficient hard copies of the brigade order and all key accompanying documents are provided to key personnel in accordance with TSOP.
4. Brigade operations, command, and control continue during planning process.

Tasks (from the Task List)	**OC 1**	**OC 2**	**OC 3**	**OC 4**
1. The brigade commander and staff direct and lead the brigade during planning for the battle.				X
2. The brigade receives an order initiating a new mission from higher headquarters.	X	X		
3. The brigade commander and staff conduct mission analysis.	X	X		
4. The brigade executive officer directs the staff in the preparation and issuance of a brigade warning order.	X			
5. The brigade commander issues initial planning guidance.	X	X		
6. The brigade commander and staff prepare estimates.	X			
7. The brigade commander and staff develop course(s) of action.	X			
8. The brigade commander and staff analyze course(s) of action.	X			
9. The brigade staff compares course(s) of action.	X			
10. The brigade commander announces decision.	X			
11. The brigade staff prepares the operations order.	X	X	X	
12. The brigade commander and staff issue the operations order.	X	X	X	

Figure D-2. Overview of tasks by outcomes for BF 18 FA.

2) Selection of supporting tasks. Trainers must also select supporting tasks. Supporting tasks are blocks of performance required by the task. Each task and supporting task is structured to describe actions to be performed (e.g., steps) or the end states of the task (i.e., aspects of the standard). The detailed description for each task and supporting task is contained in the Task List component. An excerpt from that component of the BF 18 FA is shown in Figure D-3.

5. **The brigade commander issues initial planning guidance.** [FM 101-5, Chap 4, p. 4-15]

a. The brigade commander develops planning guidance: [FM 101-5, p. 4-16; FM 71-3, p. 3-3]

1) Using the results of his own mission analysis and his METT-T assessment. [FM 101-5, p. 4-16]

2) Using the results of the brigade staff's mission analysis. [FM 6-20-40, p. 2-1; FM 6-20-50, p. 2-1; FM 6-20-10, p. 1-5; FN-Joint Readiness Training Center (JRTC); FN-194 armor (AR)]

b. The brigade XO prepares the brigade staff to receive the brigade commander's guidance. [FM 101-5, p. 4-15; ARTEP 71-3 MTP, Task 71-3-0001/2]

1) Determines who must be present at the commander's guidance briefing, if not SOP (e.g., engineer battalion Cdr, fire support coordinator (FSCOORD), MP platoon leader).

2) Ensures staff is prepared to take notes on guidance issued (depending on the level of detail and specificity of guidance).

c. The brigade commander issues planning guidance to the brigade staff, which may include: [FM 101-5, p. 4-17; FM 6-20-40, p. 2-1, 2-3; FM 6-20-50, p. 2-1, 2-3; FM 6-20-10, p. 1-7; ARTEP 71-3 MTP, Task 71-3-0001/3]

1) Enemy COA. [FM 101-5, p. 4-17]

2) Restated mission. [FM 101-5, p. 4-18]

Figure D-3. Example of supporting tasks extracted from the Task List of BF 18 FA.

3) Identification of references. As Figure D-3 also illustrates, the doctrinal source (publication number and task number or page number), in brackets, is included with the listing of each task and supporting task. Trainers can refer to the References component to determine the doctrinal publication title and publication date. They can then refer to doctrinal source material for further detail and context, if desired. Figure D-4 provides examples taken from the References component of BF 18.

Field Manuals (FMs)	
6-20-40	Tactics, Techniques, and Procedures for Fire Support for Brigade Operations (Heavy)
6-20-50	Tactics, Techniques, and Procedures for Fire Support for Brigade Operations (Light)
71-3	The Armored and Mechanized Infantry Brigade
101-5	Command and Control for Commanders and Staff (Draft)
Army Training and Evaluation Program (ARTEPs)	
71-3-MTP	Mission Training Plan for the Heavy Brigade Command Group and Staff

Figure D-4. Excerpt from References component of BF 18 FA.

4) Identification of techniques and useful training information. As part of the task selection process and the planning of the training event, trainers can refer to the Lessons Learned component. This component identifies lessons learned extracted from the CALL publications. This component also provides information not necessarily contained in the applicable doctrinal references but determined to be relevant to training of the function based on performance history of brigades at the CTCs. In other cases, lessons learned at CTCs may provide a clearer definition of how tasks should be performed and the conditions under which they must be performed. An excerpt from that component of the BF 18 FA is shown in Figure D-5.

5. **The brigade commander issues initial planning guidance.** LL - Determine the amount of planning guidance the staff requires to develop the plan. [CALL Newsletter No. 93-3: The Battalion and Brigade Battle Staff, p. 9] LL - Do not suppress the staff's ability to plan by providing excessive planning guidance. [CALL Newsletter No. 93-3: The Battalion and Brigade Battle Staff, p. 9] LL - Sketch the initial concept of the operation for the staff. [CALL Newsletter No. 93-3: The Battalion and Brigade Battle Staff, p. 9]

Figure D-5. Excerpt from Lessons Learned Integrated into the Task List component of BF 18 FA.

b. Selecting the Training Audience. After determining which tasks must be trained, trainers should next identify the training audience. The Key Participants by Task component of the BF FA supports that analysis. This component, based on the unit's TO&E, specifies the participants required to perform the tasks selected for training. One potential result of this review is that trainers may have to coordinate (through the appropriate commanders) with external units to have a specific special staff member participate in the training event. Figure D-6 depicts an example of that component of the BF 18 FA.

Tasks 5. **The brigade commander issues initial planning guidance.** **Participants** Bde Cdr, Bde XO, Bde CSM, Bde S2, DS MI Co Cdr, Bde S3, Bde S3-Air, Bde S3 operations (Opns) Sgt, CMLO, FSCOORD, FSO, Engr Bn Cdr, ABE, air defense liaison officer (ADLO), aviation liaison officer (AVLO), air liaison officer (ALO), Bde S1, Bde Chaplain, Bde Surgeon, MP platoon (Plt) leader (Ldr), Bde S4, brigade support officer (BSO), Bde HQ Co commandant (Cmdt), Bde S5 (if assigned)

Figure D-6. Excerpt from Key Participants by Task component of BF 18.

c. Identifying Task Training Sequences and Products To Support Training. Unit trainers must also decide which products and information sources must be replicated or

emulated to introduce external stimuli to the training events. The Flow Charts and Key Inputs and Outputs components help determine that information.

The flow charts are used to determine: (a) the flow of tasks during each battle phase; (b) vertical task linkages (to higher and lower echelon units); (c) horizontal task linkages (to tasks in other BFs for the echelon being analyzed); and (d) information input and output which affect relevant tasks. The flow charts provide a graphical description of tasks as they are sequenced within the framework of the battle phases. Although the sequencing of tasks throughout each battle phase is intended to reflect the flow of tasks, tasks may be performed concurrently or may interact with preceding or subsequent tasks.

The Inputs section of the Key Inputs and Outputs component contains critical information, organized by the doctrinal product or means used to communicate it, required by participants to achieve the purpose of the BF. The information and products described must be replicated to drive training events. The Lessons Learned Integrated into the Task List component can also support identification of conditions to be replicated.

The Outputs section of the Key Inputs and Outputs component describes information which results from the performance of the BF tasks. The Outputs should be covered by performance standards and should usually be covered during the after action review (AAR). An excerpt from the Key Inputs and Outputs component of the BF 18 FA is shown in Figure D-7.

KEY INPUTS

D - 4 **GUIDANCE AND INFORMATION FROM THE DIVISION COMMANDER AND STAFF.**

a. Division commanders verbal or written guidance.
b. Operational situation reports (OPSITREPs).
c. Periodic personnel report (PPREPT).
d. Periodic intelligence report (PERINTREP).
e. Periodic operation report (PEROPRPT).
f. Periodic logistics report (PERLOGRPT).
g. Periodic civil affairs report (PERCARPT).
h. Engineer reports.
i. Field artillery reports.
j. Air defense artillery reports.
k. Other reports of planning or critical combat information of interest to the brigades.

KEY OUTPUTS

Bde - 3 **BRIGADE WARNING ORDER**

a. Mission, intent, and CCIR of brigade commander.
b. Graphics.
c. Types of fire support munitions available, including CSR and required supply rate (RSR).
d. Enemy situation.
e. Assets available for collection of information and intelligence.
f. Task organization.

Figure D-7. Excerpt from Key Inputs and Outputs component of BF 18 FA.

d. Determining Prerequisite Training Tasks. If units are to obtain full benefit from training, participants must have previously achieved a level of proficiency in the individual and collective tasks required to enable safe and effective training of the selected tasks. Identification of such prerequisite tasks is accomplished by analyzing the Gate Tasks component. Trainers use this information to provide focus for individual training, subordinate echelon collective training, and staff training. An excerpt from the Gate Tasks component for the BF 1 FA contained in this research product is shown in Figure D-9.

5.The brigade commander issues initial planning guidance.

S2

[STP 34-35II-MQS, Intelligence]

- Conduct situation development [01-3381.01-4016].

Officer Common Tasks:

[STP 21-II-MQS, Common Tasks]

- Brief to Inform, Persuade, or Direct [01-9007.01-0250]
- Communicate effectively as a commander or staff officer [03-9001.12-0003]

NCO Common Tasks for: All Primary and Special Staff NCOs

[STP 21-24-SMCT, Common tasks]

- Prepare situation report [SITREP] [071-332-5022].
- Prepare a strip map [551-721-3359].
- Prepare an operation overlay [071-332-5000/ 71-3-3002[2] MTP 71-3].
- Conduct operations security [OPSEC] procedures [113-573-0002].
- Integrate risk management into mission [850-001-4001].

[ARTEP 71-3-MTP]

- Perform duties in a tactical operations center or admin/log command post [7-1-3904/3036].
- Analyze tactical mission statement [ARTEP 71-3 MTP, Task 71-3-3001].
- Prepare plans/orders/annexes IN ACCORDANCE WITH FMs 71-2 and 101-5 [7-1-3904[9] / 71-3-3002].
- Prepare operational journals [ARTEP 71-3 MTP, Task 71-3-2006[2]].
- Advise and assist staff on elements of BOS that support/impact their staff function [ARTEP 71-3 MTP, Task 71-3-0001].
- Maintain the current situation (71-3-3003).

Figure D-8. Excerpt from Gate Tasks component of BF 18 FA.

Training Developers

The TRADOC service schools (proponents) develop training materials to guide individual and collective training. Training development is conducted within the framework of the systems approach to training. The BF FAs support the systems approach for collective training by identifying not only the tasks for each type of unit, but also horizontal and vertical relationships within each BOS, relationships among BOS, and relevant details about the relationships. The descriptions of interrelationships, which describe the scope of required synchronization plus details about tasks and supporting tasks, provide training developers with information about the content of training which they are supporting.

Within TRADOC, current training development supports Force XXI. The BF FAs are especially germane to the WARFIGHTER XXI (collective) emphasis. The information in each BF FA can be applied within each of the five WARFIGHTER XXI components:

- Standard Army Training System (SATS)
- TSPs
- TADSS
- Standard After Action Review System (STAARS)
- Army Training Digital Library (ATDL)

1. Standard Army Training System

The SATS is a computer-based software system that automates training management doctrine. The most direct connection of BF FAs to SATS is through the Combined Arms Training Strategy (CATS). This is the mechanism for establishing long-range and short-range unit training strategies. Each CATS identifies tasks, drills and exercises, TADSS, and resources to support training for each unit type. BF FA components help developers identify tasks to be addressed by the strategy; the FAs are especially useful for identifying staff tasks that are not currently included in ARTEP-MTPs. In addition, BF FAs directly support two elements of the CATS--Training Unit Audience and Prerequisite Training Gates. Training developers can extract information about the audience for training from the Key Participants by Task component. They can find prerequisites for the tasks in the Gate Tasks component. Figure D-9 shows extracts from the CATS for the Armor Battalion Task Force that were based on the BF FAs for the battalion task force.

Training Unit Audience	**Prerequisite Training Gates**
MOVEMENT TO CONTACT	
Full TF, including Slice (includes FSO/FSE, combat electronic warfare and intelligence (CEWI) Assets, Engineer, ADA, tactical air control party (TACP), TF Combat/Field Trains (BSA))	**TF Command Posts, Staff and Slice (Attached units, staff elements, and LNOs)** - Assessed at "T" level task proficiency in the performance of BOS functions and supporting tasks: 7-1-3003, 4, 5, 6, 7, 8, 9, 14, 15, 18, 19, 21, 22, 23 24, 27. . .

Figure D-9. Extract from CATS for battalion task force.

2. Training Support Packages

A TSP for collective training integrates training products, materials, and information necessary to train one or more tasks. BF FAs support development of unit preparation materials, tactical materials, and trainer materials. Examples of how the components can contribute to development of TSPs include:

- The Task Lists component or Tasks Organized by Outcomes component can be a useful first draft for a training and evaluation outline. Since both lists may include tasks that are not explicitly described in ARTEP-MTPs, they are especially valuable in designing staff training.
- Training developers can augment the training and evaluation outline by providing tactics, techniques, and procedures drawn from Lessons Learned Integrated into the Task List component.
- Several components work together to specify conditions that must be replicated for realistic training. The Flow Charts and Key Participants by Task components show the type of horizontal and vertical interactions that should be built into the scenario. The Task Lists and Key Inputs and Outputs components describe the scope of those interactions. The inputs and outputs can be especially useful in packaging required information to train particular tasks.
- In addition to setting out the conditions, the Purpose and Outcomes and Key Inputs and Outputs components can be the basis for building "A Way" demonstrations of how the various units, sections, and individuals are synchronized during the operation and what results the event/exercise should produce.
- The Purpose and Outcomes component can be a guide for organizing an AAR. Once an OC identifies an outcome to be sustained or improved, the Tasks Organized by Outcomes component can be used to identify particular tasks and supporting tasks to address in the AAR.

3. Training Aids, Devices, Simulators, and Simulations (TADSS)

BF FAs support TADSS development by defining requirements in terms of tasks which should be performed. In other words, the BF FAs describe the "what" of training so that TADSS developers can develop the "how." The FAs are especially valuable for specifying interactions between echelons and among units. Three components give such information: Flow Charts, Tasks Linked to Other BFs/Units, and Key Participants by Task.

4. Standard After Action Review System (STAARS)

The STAARS will be linked to live, virtual, and constructive exercises and operations with the intent of translating lessons learned into leader development and collective training concepts, methods, and strategies. Since BF FAs structure assessments at successively precise levels (mission, BOS, BF, outcome, and task), they would be well suited to an automated feedback

system. The BF FAs can also provide a useful level for aggregating CTC-based lessons learned between the task and BOS levels. In the same way that the Purpose and Outcomes component can facilitate AARs by CTC OCs, the information in that component can structure lessons learned.

5. Army Training Digital Library (ATDL)

The ATDL is a repository of digital information related to training. BF FAs are compatible with ATDL formats and some FAs have been partially formatted into the Automated Systems Approach to Training. The ATDL makes it possible to share the information from BF FA components with commanders in the field through the interactive electronic "library without walls" that provides digitized access to training information. In addition, the BF and outcome structure could be useful in organizing task-related information within ATDL.

Appendix E

ACRONYMS AND ABBREVIATIONS

This component identifies the acronyms used by the authors in the function analysis. Acronyms were derived from relevant doctrinal publications.

2IC	second in command
A2C2	Army airspace command and control
AAR	after-action review
ABE	assistant brigade engineer
ACA	airspace coordination area
ADA	air defense artillery
ADC	area damage control
ADW	air defense warning
AFATDS	advanced field artillery tactical data system
AGM	attack-guidance matrix
A/L	administrative/logistics
ALO	air liaison officer
ALOC	administration and logistics operation center
AN	author note
AO	area of operations
App	appendix
ARI	Army Research Institute
ARTEP	Army Training and Evaluation Program
ASL	authorized stockage list

ASR	alternate supply route
ATC	air traffic control
ATDL	Army Training Digital Library
ATI	artillery target intelligence
ATO	air tasking order
ATP	ammunition transfer point
AWOL	absent without leave
AXP	ambulance exchange point
BAO	battalion/brigade ammunition officer
BAS	battalion aid station
BCC	battlefield circulation control
BDA	battle damage assessment
Bde	brigade
BF	battlefield function
BFV	Bradley Fighting Vehicle (M2/M3)
BICC	battlefield information coordination center
Bn	battalion
BOC	battery operations center
BOS	battlefield operating system(s)
BSA	brigade support area
BSOC	battalion support operations center
Btry	battery

C2	command and control
C3	command, control, and communications
C3I	command, control, communications, and intelligence
CALL	Center for Army Lessons Learned
CAS	close air support
CATS	combined arms training strategy
CCF	critical combat function(s)
CCIR	commander's critical information requirements
Cdr	commander
CI	counterintelligence
CL	Class
CL IV	construction and barrier material
CL V	ammunition
CL VIII	medical material
CL IX	repair parts and components
CMLO	chemical officer
CMO	civil-military operations
COA	course of action
COLT	combat observation lasing team
COMSEC	communications security
CONOPS	continuous operations
CP	command post

CSM	command sergeant major
CSR	controlled supply rate
CSS	combat service support
CTC	Combat Training Center
D3A	decide, detect, deliver and assess
DF	direction finding
DIVARTY	division artillery
DP	decision point
DPICM	dual-purpose, improved, conventional munitions
DS	direct support
DST	decision support template
DTDD	Directorate of Training Development and Doctrine
DTTP	doctrine, tactics, techniques, and procedures
EEFI	essential elements of friendly information
Engr	engineer
EPW	enemy prisoner(s) of war
EW	electronic warfare
FA	field artillery; function analysis
FAC	forward air controller
FASCAM	family of scatterable mines
FASP	field artillery support plan
FCT	firepower control team

FDC	fire direction center
FDO	fire direction officer
FEA	front end analysis
FFIR	friendly forces information requirements
FIST	fire support team
FIST-V	fire support team vehicle
FM	field manual
FN	field note
FO	forward observer
FORSCOM	U.S. Army Forces Command
FPF	final protective fire
FRAGO	fragmentary order
FS	fire support
FSB	forward support battalion
FSCL	fire support coordination line
FSCM	fire support coordinating measure
FSCOORD	fire support coordinator
FSE	fire support element
FSEM	fire support execution matrix
FSO	fire support officer
GPS	global positioning system
GS	general support

GSR	general support-reinforcing
GSR	ground surveillance radar
HHB	headquarters and headquarters battery
HPT	high payoff targets
HPTL	high payoff target list
HQ	headquarters
HSS	health service support
IFSAS	improved fire support automation system
intel	intelligence
INTSUM	intelligence summary
IPB	intelligence preparation of the battlefield
IR	information requirements
ITTBBST	Innovative Tools and Techniques for Brigade and Below Staff Training
JAAT	joint air attack team
LAN	local area network
LD	line of departure
LL	lessons learned
LNO	liaison officer
LOC	lines of communication
LRP	logistics release point
MCI	minimum critical information

MCOO	modified combined obstacle overlay
MDMP	military decision-making process
MEDEVAC	medical evacuation
met	meteorology
METL	mission essential task list
METT-T	mission, enemy, terrain, troops, and time available
MOPP	mission-oriented protective posture
MP	military police
MQS	military qualification standards
MSB	main support battalion
MSR	main supply route
MTP	mission training plan
MV	muzzle velocity
MWR	morale, welfare, recreation
NAI	named area of interest
NBC	nuclear, biological, and chemical
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NSF	naval surface fires
NTC	National Training Center
O&I	operations and intelligence
OB	order of battle

OC	observer-controller
OEG	operational exposure guide
OPFAC	operational facility
opns	operations
OPORD	operations order
OPSEC	operations security
OPSITREP	operational situation report
PADS	position azimuth determining system
Pam	pamphlet
PERCARPT	periodic civil affairs report
PERINTREP	periodic intelligence report
PERLOGRPT	periodic logistic report
PEROPRPT	periodic operation report
PGM	precision guided munitions
PIR	priority intelligence requirements
PLL	prescribed load list
PPREPT	periodic personnel report
PSNCO	personnel services non-commissioned officer
PSYOP	psychological operations
R&S	reconnaissance and surveillance
RACO	rear area combat operations
RAP	rocket assisted projectile

RDO	radar deployment order
Retrans	retransmission
RFL	restrictive fire line
ROE	rules of engagement
ROM	refuel-on-the-move
RSO	reconnaissance and survey officer
RSOP	reconnaissance, selection, and occupation of position
RSR	required supply rate
S1	adjutant/personnel officer, brigade and battalion staff
S2	intelligence officer, brigade and battalion staff
S3	operations and training officer, brigade and battalion staff
S4	supply/logistics officer, brigade and battalion staff
SALT	supporting arms liaison team
SALUTE	size, activity, location, unit, time, equipment
SATS	Standard Army Training System
SEAD	suppression of enemy air defenses
sgt	sergeant
SIT TEMP	situation template
SITMAP	situation map
SITREP	situation report
SM	soldier's manual
SMCT	soldier's manual of common tasks

SME	subject matter experts
SO	signal officer
SOI	signal operating instructions
SOP	standing operating procedures
Spec	specialist
SPOTREP	spot report
SR	senior
STAARS	standard after action review system
STP	soldier's training publication
TA	task analysis
TACFIRE	tactical fire direction system
TADSS	training aids, devices, simulators, and simulations
TAI	targeted area of interest
TF	task force
TG	Trainer's Guide
TOC	tactical operations center
TOE	tables of organization and equipment
TOW	tube-launched, optically tracked, wire-guided missile
TPL	time-phase line
TRADOC	U.S. Army Training and Doctrine Command
TRP	target-reference point
TSOP	tactical standing operating procedures

TSP	training support package
TSS	target selection standards
TTP	tactics, techniques, and procedures
UAV	unmanned aerial vehicle
UBL	unit basic load
ULLS	unit level logistics systems
UMCP	unit maintenance collection point
USAARMC	United States Army Armor Center
USAARMS	United States Army Armor School
USAFAS	United States Army Field Artillery School
USMC	United States Marine Corps
USN	United States Navy
WAN	wide area network
WARNO	warning order
WCS	weapons control status
WSRO	weapons system replacement operations
XO	executive officer